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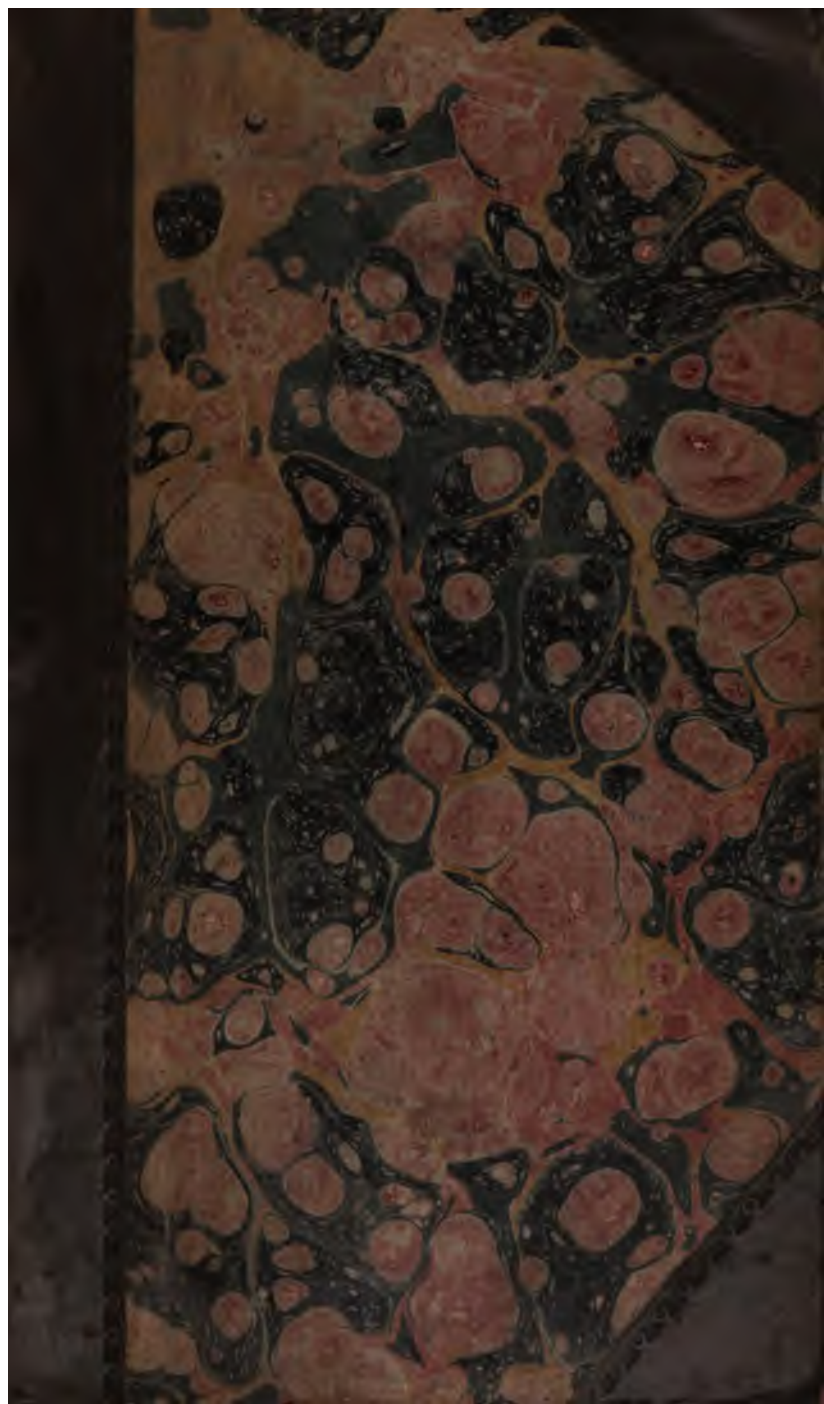
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**HORTUS ANGLICUS;**  
**OR, THE**  
**MODERN ENGLISH GARDEN:**  
CONTAINING  
A FAMILIAR DESCRIPTION  
OF ALL THE PLANTS WHICH ARE CULTIVATED IN THE CLIMATE  
OF GREAT BRITAIN, EITHER FOR USE OR ORNAMENT,  
AND OF  
A SELECTION  
FROM THE ESTABLISHED FAVOURITES OF THE  
Stove and Green-house;  
ARRANGED  
ACCORDING TO THE SYSTEM OF LINNÆUS;  
WITH  
REMARKS  
ON THE PROPERTIES OF THE MORE VALUABLE SPECIES.

BY THE  
AUTHOR OF "THE BRITISH BOTANIST."

Blossoms and fruits at once of golden hue  
Appear'd, with gay enamel'd colours mix'd.  
MILTON.

IN TWO VOLUMES.  
VOL. I.

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PRINTED FOR F. C. & J. RIVINGTON,  
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1822.





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TO THE STUDENTS OF  
**The British Botanist,**  
THE  
FOLLOWING PAGES  
INTENDED TO INTRODUCE THEM  
TO  
A KNOWLEDGE OF EXOTIC BOTANY  
ARE INSCRIBED,  
BY THEIR OBLIGED SERVANT,  
  
THE AUTHOR.







## PREFACE.

---

LORD BACON's well-known remark, that a garden affords the purest of human pleasures, though quoted for the thousandth time, is in no danger of being esteemed trite or wearisome, since its congeniality to the feelings of mankind in all ages and countries have been universally acknowledged : an attempt, therefore, to extend the satisfaction derivable from such a source, it is hoped will be considered as a laudable effort, and meriting an indulgent regard.

There are few persons, when enjoying the recreation of a walk in the garden, or shrubbery, but who are desirous of possessing some knowledge of the beautiful objects which surround them. To those who are initiated in the elements of botanical science, but whose chief enquiry has been concerning the plants of their native country, it is not a little embarrassing to feel such a general want of information on the subject, as may expose them to the accusation of having pur-



sued the study of those productions whose only recommendation, perchance, was their being indigenous, and having neglected those, which, being cultivated on all sides, afforded, by their superior use or beauty, a stronger inducement for curiosity and research. To relieve a perplexity of this nature is the immediate object of the present undertaking: for though such works as Dr. Withering's "Arrangement of British Plants," Sir J. E. Smith's "Flora Britannica," and others of acknowledged merit, for the purpose of assisting the student in the knowledge of our native species, have been numerous; yet an easy, intelligible, and compendious guide to an acquaintance with those plants which form the pride and delight of the modern garden, in its several departments, is not to be found in the English language.

The "Species Plantarum" of Linnæus may be thought to contain the desired information; but being in Latin, it is, consequently, useless to a large class of readers. And though translations in English are extant, yet the very comprehensiveness of the work unfits it as a reference to the inexperienced enquirer, who amidst a description of more than twenty thousand plants could scarcely fail of being bewildered.



In abridging so copious a list, the authority of the "Hortus Kewensis, or a Catalogue of the Plants cultivated in the Royal Botanic Garden at Kew," (second edition) has been principally relied on. All the plants which in that work are marked as hardy, or flourishing in the open air, whether indigenous or exotic, and possessing any sort of attraction, either for their useful qualities, or beautiful appearance, are adopted, excepting the common grasses. Of the stove and green-house plants, a small selection only of those most frequently seen could be admitted, from the necessity of keeping the volumes in moderate compass.

The essential generic characters are carefully collected from the last edition of the *Species Plantarum*, edited by Willdenow, with occasional emendations and additions from the *Hortus Kewensis* and the works of Sir J. E. Smith. They are placed at the beginning of each class; and it has been thought unnecessary to repeat any part of them, or to make a two-fold division according to their supposed natural affinities, and their place in the system of Linnæus: facility of investigation being the chief object, it was considered as more readily effected by placing these characters together in a synoptical view. The



numbers of the genera are for the sole purpose of an easy reference.

As the present botanical fashion seems to be much in favour of what is called natural arrangement, and which, by unprejudiced judges, may be thought worthy of assisting, though not of superseding the artificial system of Linnæus; the place of each genus, when ascertained, in the natural systems both of Linnæus and Jussieu is inserted: the etymology of the genera, though often attended with uncertainty, it is hoped will contribute to the amusement, if not to the satisfaction of the reader. To increase the utility of the work, both the generic and specific names are accented, the accent being placed on the last letter of the accented syllable. The number of the species contained in each genus is given from the *Species Plantarum*. As botany is a progressive science, extreme accuracy on this point is scarcely attainable; the intention is to guide the enquirer into a tolerably exact knowledge of the extent of each genus, which otherwise he might be very apt to mistake; as perhaps a single species only, as, in the genus *Justicia*, for instance, has been described, of a very numerous tropical family.



The specific characters are taken from the same sources as the generic ; they are distinguished by being placed between inverted commas, and are to be considered as the words of Linnæus, occasionally amended : but the bare specific character being scarcely sufficient for the complete elucidation of each plant, it is followed by an extended description, drawn from such esteemed works as the Botanical Magazine, Sowerby's English Botany, Miller's Dictionary by Martyn, Rees's Cyclopædia, &c. &c. combined with the author's practical observations. Much care and labour have been bestowed in endeavouring to render each description at once compendious and clear ; to the botanical articles of the last mentioned work, which are admitted to be the production of the learned President of the Linnæan Society, the author acknowledges a deep sense of obligation ; particularly in the summary of the uses of plants, which will be found not the least interesting part of his volumes.

The time of flowering, native country, and date of introduction of each plant, rest implicitly on the authority of the Kew Catalogue. It is not to be supposed but that several common garden herbs were introduced many ages previous to the date assigned, but the editors of that work proceeded on the plan of



affixing the date to the same year as that of the publication of the earliest English author, in which the plant is mentioned.

In the admission of established genera and species, Willdenow's last edition of the *Species Plantarum* has been generally followed; that work being usually considered as a standard text, acknowledged and appealed to throughout Europe. In deserting the authority of the *Hortus Kewensis* on this point, the author cannot but consider that some slight irregularity in genera long known and established, is a more endurable evil than those endless mutations which destroy the universality of botanical language, and throw back the science into that confusion of names, which was complained of even in the days of Linnaeus. This remark is particularly applicable to the class *Tetradynamia*, which, in the *Kew Catalogue*, consisting of two hundred and thirty-five species, not fewer than sixty-four have changed their name, either by removal into a different genus, or by having been formed into genera altogether new.

To unite botanical science with useful information, has been the constant aim of the author. He confides his work, therefore, to the favour of the public; trust-



ing that it will be found to promote the prevailing regard for the attractions of the vegetable creation ; the contemplation of which, said old Gerarde in his herbal, as long ago as the year 1597, " is a study for the wisest, an exercise for the noblest, a pastime for the best."



## ABBREVIATIONS.

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<b>A.....</b>	<b>Annual.</b>
<b>B.....</b>	<b>Biennial.</b>
<b>P.....</b>	<b>Perennial.</b>
<b>S.....</b>	<b>Shrub.</b>
<b>T.....</b>	<b>Tree.</b>
<b>E. S.....</b>	<b>Evergreen Shrub.</b>
<b>E. T.....</b>	<b>Evergreen Tree.</b>
<b>Gr. Ho.....</b>	<b>Green House.</b>
<b>Hot Ho. ....</b>	<b>Hot House.</b>
<b>Nat. Ord.....</b>	<b>Natural Order.</b>
<b>Linn.....</b>	<b>Linnaeus.</b>
<b>Juss. ....</b>	<b>Jussieu.</b>



# HORTUS ANGLICUS.

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## CLASS I.

### MONANDRIA.

#### *Order Monogynia.*

I. CANNA. Corolla six-parted erect; Nectary two-parted, one segment revolute; Style united at its base to the Corolla; Calyx three leaved; Capsule three celled.

II. LOPEZIA. Calyx four leaved; Corolla irregular, five petaled; Capsule of four valves, and four cells; many seeded.

#### *Order Digynia.*

III. BLITUM. Calyx three-cleft, forming a berry; Seed one; Corolla none.

IV. CORISPERMUM. Calyx none; Corolla two petals; Seed one, oval, naked.



## CLASS I.

## MONANDRIA.

*Order Monogynia.*

I. CAN'NA, from a Hebrew word, signifying a reed. Natural order, *Linnaeus*, Scitamineæ. *Jussieu*, Cannæ. 5 Species.

1. C. In'dica. *Indian Reed or Shot*. "Leaves ovate, acuminate at both ends, nerved;" root leaves a foot long, nerved; stems three or four feet high, upright; flowers red, in an upright terminal loose spike. It has two varieties, by some writers made distinct species; one with a more brilliant scarlet, the other with a yellow flower. These beautiful plants can be preserved only by the protection of a stove; they flower most part of the year. Native of both Indies. Cultivated as early as 1570. P. Hot Ho.

II. LOPE'ZIA, in memory of Thomas Lopez, a naturalist, who held an appointment in America under the emperor Charles the Fifth. Nat. ord. *Linn.* not arranged. *Juss.* Onagræ. 3 Species.

1. L. Hirsu'ta. *Hairy Lopezia*. "Leaves ovate, downy; stem round, hairy," branched, pale green; leaves alternate, stalked, pointed; clusters at the end of the branches, leafy; flowers spreading, variegated with pink, deep red, and white, in shape not unlike some sort of little flies; they exhibit a striking



instance of irritability when touched, in the manner in which the nectary and the stamen fly from the pistil. September to November. Mexico. 1796. A. Hot Ho.

2. *L. Corona'ta*. *Coronet flowered Lopezia*. "Leaves smooth and shining; stem angular, rising from the decurrent foot stalks; floral leaves longer than the flower stalks;" flowers the same as the former, of which perhaps it is only a variety, with foliage more deep and shining, and of more luxuriant growth; it is esteemed hardy. July to September. Mexico. 1805. A.

#### *Order Digynia.*

III. *BLI'TUM*, from βλητον, *abjiciendum*, fit only to be thrown away. Nat. ord. *Linn.* *Holoracææ.* *Juss.* *Atriplices.* 2 Species.

1. *B. Capita'tum*. *Berry-headed Strawberry Blite*. "Heads spiked, terminal;" leaves triangular, on long foot stalks; flowers in small heads from every joint of the stem, purplish. July. Austria. 1633. A.

2. *B. Virga'tum*. *Slender-branched Strawberry Blite*. "Heads scattered, lateral;" stem a foot high; leaves smaller, flower heads smaller and paler than in the former species, of which this is perhaps only a variety. July to September. South of Europe. 1680. A.

After flowering, the little heads of these plants swell to the size of wood strawberries, and have much the same



appearance; they are full of a purple juice, much used formerly in cookery for colouring puddings.

IV. CORISPER'MUM, from *χορίς* a bug or tick, and *σπέρμα* seed. Nat. ord. *Linn.* Holoraceæ. *Juss.* Atriplices. 2 Species.

1. C. Hyssopifo'lium. *Hyssop-leaved Tick Seed.*  
 "Spike terminating; leaves linear, nerveless, unarmed;" stem branched, scored; leaves alternate, soft, ending in a fine point; spikes long, with alternate floral leaves, tiled; flowers membranous, whitish; the lower flowers often with three stamens. July. Russia. 1739. A.

2. C. Squarro'sum. *Rough-spiked Tick Seed.*  
 "Spikes axillary, ragged; leaves lanceolate, pointed, nerved;" stem branched; leaves five nerved; spikes sessile, short, crowded, with spreading, pointed, floral leaves; perhaps only a variety of the former. August. Tartary. 1759. A.

These plants are common in Russia, where in some parts they afford pasture for camels, but having little beauty they are rarely cultivated in England, unless in botanic gardens.



## CLASS II.

## DIANDRIA.

*Order Monogynia.***1. *Flowers of one petal, regular, inferior, or below the germ.***

I. **OLEA.** Corolla four cleft; segments ovate; drupe one-seeded.

II. **CHIONANTHUS.** Corolla four cleft; segments very long; drupe scored; one seeded.

III. **PHILLYREA.** Corolla four cleft; berry one-seeded, globose.

IV. **LIGUSTRUM.** Corolla four cleft; berry two celled, with two seeds in each.

V. **SYRINGA.** Calyx four toothed; corolla four cleft, tubular; capsule with two cells and two valves.

VI. **JASMINUM.** Corolla five to eight cleft, salver-shaped; berry two-grained; seeds solitary, coated.

**2. *Flowers of one petal, irregular, inferior, seeds in a capsule.***

VII. **VERONICA.** Corolla four cleft, wheel-shaped, its lower segment narrower; capsule superior, of two cells.

VIII. **GRATIOLA.** Corolla four cleft, two lipped, reversed; filaments four, two antherless; capsule two celled.



IX. JUSTICIA. Calyx deeply five cleft; corolla ringent; capsule of two elastic valves and two cells.

X. PINGUICULA. Corolla ringent, spurred; calyx two lipped, in five segments; capsule many seeded.

XI. CALCEOLARIA. Corolla ringent, inflated; calyx four cleft; capsule two celled; two valved.

XII. UTRICULARIA. Corolla ringent, spurred; calyx of two equal leaves; capsule one celled.

*Bignonia Catalpa.*

3. *Flowers of one petal, irregular, inferior, seed naked.*

XIII. LYCOPUS. Corolla four cleft, one segment notched; stamens distant; seeds four, naked.

XIV. AMETHYSTEA. Corolla five cleft, in nearly equal segments, lowest segment concave; stamens approximating.

XV. ZIZIPHORA. Corolla ringent, upper lip reflected, flat; calyx thread-form; seeds four.

XVI. MONARDA. Corolla ringent, upper lip linear, inclosing the stamens; seeds four.

XVII. ROSMARINUS. Corolla ringent, upper lip sickle form; stamens curved, simple, with a tooth; calyx three cleft; seeds four.

XVIII. SALVIA. Corolla ringent; calyx two lipped filaments fixed across the top of a little foot stalk.

XIX. CUNILA. Corolla ringent, upper lip erect, flat; filaments four, two antherless; calyx five toothed; seeds four.



XX. COLLINSONIA. Corolla nearly ringent, lower lip many cleft, hair like.

4. *Flowers many petaled, inferior.*

XXI. FONTANESIA. Corolla two petals, deeply divided; calyx in four deep segments; capsule two celled, not bursting.

5. *Flowers superior.*

XXII. CIRCÆA. Corolla of two petals, inversely heart shaped; calyx two leaved; capsule two celled; seeds solitary.

CLASS II.

DIANDRIA.

*Order Monogynia.*

I. O'LEA, from *λαιός*, smooth, on account of its oil. Nat. ord. *Lian.* Sepiariæ. *Juss.* Jasmineæ. 7 Species.

1. O. Europæa. *European Olive Tree.* "Leaves lance-shaped entire, pale beneath, clusters axillary, dense," branches square, spreading, leaves opposite, stalked, flowers small, white, June to August. South of Europe. 1570. E. S. Gr. Ho.

2. O. Fra'grans. *Sweet scented Olive Tree.* "Leaves egg lance-shaped," serrate, flower stalks simple,



single flowered, axillary, many together, flowers very small, white at first, afterwards yellowish brown, smelling like the highest perfumed green tea. June to August. China. 1771. E. S. Gr. Ho.

The first species requires, in England, much the same treatment as the myrtle. In all ages it has been held in peculiar estimation as the bounteous gift of Heaven; it is still considered as emblematic of peace and plenty, and the great quantity of oil which it produces, in some countries, effectually realizes the latter of these blessings. There are many varieties of this tree, mentioned by Virgil and Pliny, derived from the size and colour of the fruit; and some, by modern botanists, from the form of the leaves, as the long-leaved, the broad-leaved, the twisted-leaved, and the box-leaved Olive.

II. CHIONAN'THUS, from χιών, snow, and ανθος, a flower. Snow-flower, or Fringe Tree. Nat. ord. Linn. Sepiariæ. Juss. Jasmineæ. 5 Species.

1. C. Virginicus. *Virginian Fringe Tree, or Snow Flower.* "Peduncles three cleft, three flowered, leaves egg lance-shaped, downy beneath, drupes globular," flowers white, in pendulous bunches, corolla cut into narrow segments, drupe the size of a sloe, dark coloured. July. North America. 1736. S.

III. PHILLYRE'A, from Phillyra, the mother of Chiron, the Centaur. Nat. ord. Linn. Sepiariæ. Juss. Jasmineæ. 3 Species.

1. P. Media. *Middle sized Phillyrea.* "Leaves



egg lance-shaped, entire, sometimes serrated;" opposite, on short foot stalks, shining, green above, paler beneath, dotted, flower small, yellowish white, in axillary clusters, fruit globular, purple. This shrub has several varieties. *The Privet-leaved*; leaves oblong, lance-shaped. *The long branched*; leaves lance-shaped, branches upright. *The drooping*; leaves lance-shaped, branches drooping. *The Olive leaved*; leaves oblong, lance-shaped, branches nearly erect; and the *Box-leaved*, leaves egg-shaped, oblong, blunt. May, June. South of Europe. 1597. E. S.

2. *P. Angustifolia*. *Narrow leaved Phillyrea*. "Leaves linear, lance-shaped, mostly entire." Corolla whitish; it differs from the last in its longer and narrower leaves, this also has its varieties. *The common narrow leaved*, branches straight. *The Rosemary leaved*; leaves, awl-shaped; and *the dwarf*, branches forked. May, June. South of Europe. 1597. E. S.

3. *P. Latifolia*. *Broad leaved Phillyrea*. "Leaves ovate, somewhat heart-shaped, serrated, rarely entire, sometimes sharply toothed," of a dark shining green, flowers axillary on each side, greenish white. Its varieties are *the smooth*, leaves egg-shaped, flat, bluntly serrated: *the prickly*, leaves oblong, sharply serrated: and *the Ilex-leaved*, leaves lance-shaped, sharply serrate, bending obliquely. The *P. Latifolia* is called *true Phillyrea*, to distinguish it from the *Rhamnus Alaternus*, with which, by common gar-



deners, it is frequently confounded. May, June. South of Europe. 1597. E. S.

IV. *LIGUS'TRUM*, from *ligo*, to bind, its twigs being used for making baskets. Nat. ord. *Linn.* *Sepiariæ*. *Juss.* *Jasmineæ*. 2 Species.

1. *L. Vulga're*. *Common Privet*. "Leaves egg lance-shaped, obtuse, with a little point, panicle stalks divided by threes," leaves in pairs, nearly sessile, flowers white, berries black; it generally remains evergreen through the winter; it varies, with leaves in threes, with leaves variegated, and with berries yellow. This shrub is remarkable for thriving amidst the smoky atmosphere of large towns. July. Britain. S.

2. *L. Lu'cidum*. *Chinese Privet, Wax Tree*. "Leaves ovate, oblong, pointed, shining above, panicle greatly divaricated," flowers copious, white, growing only, it is said, in Kew Gardens. July to Sept. China. 1794. S.

V. *SYRIN'GA*, from *Συγγή*, a pipe, the stem being hollow, or pithy, hence the old English name of Pipe Tree, now lost. There is in Ovid a nymph *Syrinx*. The word *Lilac* is Persian, signifying a flower. Nat. ord. *Linn.* *Sepiariæ*. *Juss.* *Jasmineæ*. 3 Species.

1. *S. Vulga'ris*. *Common Lilac*. "Leaves ovate, heart-shaped, stem arboreous," branches opposite, round, smooth; leaves opposite, deciduous, stalked, smooth; clusters terminal, repeatedly compound;



flowers fragrant, of a peculiar pale purplish colour, or of a darker purple, sometimes pure white. May. Persia. 1597. S.

2. *S. Persica*. *Persian Lilac*. "Leaves lance-shaped, stem shrubby," panicles more lax than the former, flowers somewhat larger, with the same variety of colour, the leaves sometimes are more or less wing-cleft. *The Chinese Lilac*, with ovate leaves, by some made a distinct species, is scarcely more than a variety of this. May. Persia. 1658. S.

Nothing contributes more to adorn the country about London than these shrubs and the Laburnum, when they blossom together, in May.

VI. JASMI'NUM, from *ιασμη*, a fragrant ointment, on account of the fine odour of the flowers. Nat. ord. *Linn.* Sepiariæ. *Juss.* Jasmineæ. 21 Species.

1. *J. Sam'bac*. *Arabian Jasmine*. "Leaves opposite, simple, elliptic, ovate, somewhat heart-shaped, membranaceous; segments of the calyx awl-shaped." Corolla eight-cleft, white, purplish in decay, highly fragrant; small branches and foot stalks of the leaves pubescent. May to August. East Indies. 1639. S. Hot Ho.

2. *J. Fruticans*. *Common Yellow Jasmine*. "Leaves in threes alternate; leaflets inversely egg wedge-shaped; branches angular, weak; segments of the calyx awl-shaped;" flowers yellow, with little scent. May to October. The Levant. 1570. S.



3. *J. Hu'mile. Italian, or Dwarf Yellow Jasmine.* "Leaves alternate, sharp, in threes, and sometimes pinnate; branches angular; segments of the calyx very short;" flowers yellow, scentless, somewhat larger than the preceding. Native country unknown. July to September. 1656. S.

4. *J. Officina'le. Common White Jasmine.* "Leaves opposite, pinnate; leaflets sharp pointed, usually seven, the odd leaflet largest; buds nearly upright;" corolla white, odorous; tube long; border sometimes only four cleft. June to October. East Indies. 1548. S.

5. *J. Azo'ricum. Azorian Jasmine.* "Leaves opposite, ternate; leaflets ovate, somewhat heart-shaped, waved; little branches smooth, round; segments of the corolla equal to the tube;" leaves shining, evergreen; flowers terminating in loose bunches; corolla clear white, of a pleasant scent. May to November. Madeira. 1731. E. S. Gr. Ho.

6. *J. Grandiflo'rum. Large-flowered Jasmine.* "Leaves opposite, pinnate; leaflets bluntish; buds horizontal; branches stronger than in the common white;" flowers larger, blush red without, white within. June to October. East Indies. 1692. S. Gr. Ho.

7. *J. Odoratiss'imum. Yellow Indian sweet-scented Jasmine.* "Leaves alternate, bluntish, in threes, or pinnate; branches round; segments of the calyx very short;" leaves shining, evergreen; end leaflet larger than the side ones; corolla yellow, most fra-



grant. May to October. Madeira. 1656. E. S.  
Gr. Ho.

Most of the species of this delightful genus have been long held in estimation, both for their beauty and fragrance.

VII. VERONICA, perhaps from *Ver*, the spring, it is also the name of a female Romish saint. Nat. ord. *Linn.* Personatæ. *Juss.* Pediculares. 57 Species.

\* *Flowers in terminal spikes, leaves more or less whorled.*

1. V. Sibīrica. *Siberian Speedwell.* "Leaves seven in a whorl; stem somewhat shaggy;" spikes dense, with nearly sessile flowers; tube of the corolla twice as long as the five cleft calyx; leaves from five to nine in a whorl, lanceolate, sessile, serrate; flowers blue, sometimes white, numerous. July to August. Siberia. 1779. P.

2. V. Virginica. *Virginian Speedwell.* "Leaves four or five in a whorl, egg lance-shaped, stalked," broader than in the former; stems lower; the plant more frequent; spikes several, at the top of the stem; corolla white, or blush colour. July to September. Virginia. 1714. P.

3. V. Spūria. *Bastard Speedwell.* "Leaves three in a whorl, or opposite, on short stalks, lanceolate, equally serrate, somewhat downy; clusters lax;" flowers blue, or flesh colour. June. Siberia. 1731. P.



4. *V. Mari'tima. Sea Speedwell.* "Leaves in threes and fours, somewhat heart-shaped, pointed, unequally serrated;" stem about two feet; flowers blue, white, or flesh coloured, in one large, dense spike, accompanied by several smaller ones; it varies, with leaves opposite. July. Coasts of Europe. 1570. P.

\*\* *Spikes terminal, leaves opposite.*

5. *V. Longifo'lia. Long-leaved Speedwell.* "Leaves ovate, pointed at both ends, doubly and sharply serrated, smooth; clusters aggregate, erect;" corolla blue. June. Austria. 1731. P.

6. *V. Inca'na. Hoary Speedwell.* "Spikes terminal, and from the upper axils; leaves crenate or serrate, lower ones stalked, uppermost entire, sessile, tapering at the base;" whole plant downy; flowers dark blue. July to September. Russia. 1759. P.

7. *V. Hy'brida. Welsh Speedwell.* "Leaves oval, blunt, roughish, unequally and bluntly serrate; stem nearly erect;" spikes very long, of innumerable blue flowers. July. Wales. P.

8. *V. Spica'ta. Spiked Speedwell.* "Spike mostly solitary; leaves stalked, bluntish, with shallow serratures, somewhat downy, the extremity entire;" flowers dark blue; the tubular part of the corolla hairy within. This species much resembles the last, but is smaller and smoother. July. England. P.

9. *V. Inci'sa. Cut-leaved Speedwell.* "Leaves lanceolate, deeply wing-cleft, smooth;" stem slender; segments of the calyx linear, lanceolate, longer than



the tube of the corolla; corolla blue, with acute segments. July. Siberia. 1779. P.

10. V. *Lacinia'ta*. *Jagged-leaved Speedwell*. "Leaves linear, wing-cleft, jagged;" a-kin to the last species, but the more short, ovate, segments of the calyx afford a clear distinction; clusters very long; corolla blue. June and July. Siberia. 1780. P.

11. V. *Pinna'ta*. *Wing-leaved Speedwell*. "Segments of the calyx lanceolate; leaves pinnate; leaflets linear, acute, sometimes toothed;" clusters numerous, of sky-blue flowers. July. Siberia. 1776. P.

12. V. *Bellidioi'des*. *Daisy-leaved Speedwell*. "Cluster corymbose, hairy, of few flowers: leaves obovate, crenate; stem simple, ascending;" flowers pale greyish blue; Miller says, reddish dark; calyx shaggy. May to July. Switzerland. 1775. P.

13. V. *Gentianoi'des*. *Gentian-leaved Speedwell*. "Radical leaves lanceolate, crenate, smooth," thick, pointed, with a pale cartilaginous edge; corolla large, bluish white, beautifully streaked. June. The Levant. 1748. P.

14. V. *Saxa'tilis*. *Rock Speedwell*. "Corymbus few flowered; leaves opposite, elliptical; stem diffuse; capsule ovate;" flowers three or five, large, blue with a red throat. July. Scotland. P.

\*\*\* *Clusters lateral*.

15. V. *Decussa'ta*. *Cross-leaved Shrubby Speedwell*. "Clusters axillary, about the ends of the branches, simple, of few flowers; leaves elliptic, en-



tire, perennial," decussated, or cross-wise; stem shrubby; flowers large, white, smelling like *Olea Fragrans*, most delightful. May to July. Falkland Islands. 1776. E. S. Gr. Ho.

16. *V. Aphyll'a. Naked-stalked Speedwell.* "Leaves obovate, crenate, hairy; flower stalks erect, naked; about three flowered;" stems trailing; leaves crowded; flower stalks solitary; near the top of each branch, a finger's length, flowers light blue. June. Switzerland. 1775. P.

17. *V. Austri'aca. Austrian Speedwell.* "Clusters on long naked stalks; leaves slightly hairy, variously wing-cleft, deeply towards the base; calyx somewhat hairy;" leaves and stem with minute hairs ad-pressed; corolla bright blue. July. Austria. 1748. P.

18. *V. Multi'fida. Fine-cut Speedwell.* "Clusters on long naked stalks, many and deeply parted, downy; segments wing-cleft; a smaller plant than the last;" divisions of the corolla broader; bright blue, leaves resembling the more common species of *Artemisia*. July. Siberia. 1748. P.

19. *V. Officina'lis. Common Male Speedwell.* "Clusters stalked, slender, acute, rather lax; leaves elliptic, serrated, rough; stem procumbent;" plant hairy; flowers pale blue, or light pink, scored. May to August. Britain. P.

20. *V. Prostra'ta. Trailing Germander Speedwell.* "Clusters mostly opposite, corymbose; leaves elliptic,



oblong, variously serrated, nearly sessile;" plant light green, more or less downy; flowers bright blue, in dense tufts. July. Germany. 1774. P.

21. *V. Latifo'lia. Great Germander Speedwell.*  
 "Clusters opposite, tapering, on long stalks; leaves sessile, ovate, somewhat heart-shaped, rough, deeply serrated;" stem erect, hairy on the two opposite sides; flowers long, numerous, brilliant, tube whitish, border blue. *V. Teucrium* is but a variety of this. June. Switzerland. 1748. P.

22. *V. Orienta'lis. Various leaved Speedwell.*  
 "Clusters lax, on leafy stalks; leaves wing-cleft, smooth, acute, tapering at the base, upper ones linear;" leaves variously cut; flowers copious, rather large, light blue, scored. June. Armenia. 1748. P.

23. *V. Urticifo'lia. Nettle-leaved Speedwell.*  
 "Clusters lax, with capillary stalks; leaves sessile, heart-shaped, pointed, serrate; stem erect, calyx four-cleft;" stem quite simple; clusters numerous, axillary, opposite, erect, loose; flowers small, flesh-coloured with crimson lines. May. Austria. 1776. P.

\*\*\*\* *Peduncles one flowered.*

24. *V. Acinifo'lia. Basil leaved Speedwell.* "Flowers solitary, stalked; leaves opposite, oval, slightly crenate, lower ones stalked, upper sessile, alternate; stem erect," somewhat hairy; flowers blue or purplish. *V. Præcox* is reckoned by some authors a variety of this; the *V. Romana* of Linnæus is the same plant. June. South of Europe. 1788. A.



25. V. Peregrina. *Purslane-leaved Speedwell*.  
 "Flowers solitary, sessile; leaves oblong, blunt,  
 toothed or entire; stem erect," branched; an herb  
 variable in size and habit, smooth, rather succulent;  
 corolla small, white. June. South of Europe.  
 1683. A.

This numerous genus contains a very natural family of  
 plants; they are commodiously arranged into sections by  
 the mode of their inflorescence, and are chiefly natives of  
 the cold or temperate regions of Europe and America.  
 We have seventeen native species, and about twenty of  
 the rest are cultivated in English gardens. The tube of  
 the corolla varies in its length; in general it is short, but  
 in the spiked species longer. The calyx also, though its  
 natural character is to be four-cleft, yet in numbers 1, 2,  
 17, 18, 20, and 21, it is five cleft.

VIII. GRATIOLA, diminutive of *Gratia Dei*, the  
 favour of God; on account of its powerful medical  
 qualities. Nat. ord. *Linn. Personatæ. Juss. Scro-*  
*phulariæ.* 14 Species.

1. G. Officinalis. *Hedge Hyssop*. "Leaves egg  
 lance-shaped, serrated, five-ribbed, smooth; flowers  
 stalked;" leaves numerous, opposite, sessile, dotted;  
 stem twelve to eighteen inches high, leafy, pale;  
 flowers yellowish, or pale purple, with red streaks,  
 sometimes white, throat hairy. July. South of Europe.  
 1568. P.

This plant, though now disused, was formerly in high  
 repute; it is strongly cathartic. It somewhat resembles



Fox-glove, both in its appearance and qualities, and has been called *Digitalis Minima*.

IX. JUSTI'CIA, from James Justice, Esq. one of the Clerks of Session in Scotland, author of the *British Gardener's Director*, 1764. Nat. ord. *Linn.* Personatæ. *Juss.* Acanthi. 89 Species.

1. J. Adhato'da. *Malabar Nut*. "Spikes axillary, opposite, stalked; floral leaves ovate, acute, ribbed; corolla somewhat closed," white; the palate veined with purple; stem arboreous. July. East Indies. 1699. S. Gr. Ho.

This plant, which is an old inhabitant of the greenhouse, was formerly called *Adhatoda*; signifying, in the language of Ceylon, a dead foetus, which it was supposed to possess the virtue of expelling. Other species of this extensive tropical genus are rarely seen in the English stoves.

X. PINGUI'CU'LA, diminutive of *pinguis*, fat, from the unctuous appearance of the leaves. Nat. ord. *Linn.* Corydales. *Juss.* Lysimachiæ. 5 Species.

1. P. Lusita'nica. *Pale Butterwort*. "Flower stalk nodding, pubescent; nectary blunt, shorter than the corolla; capsule globose;" plant stemless; leaves radical, spreading, ovate, viscid, with red veins; stalks single flowered; tube of the flower yellow, streaked with red; border lilac. Britain. June. P.

2. P. Vulga'ris. *Common Butterwort*. "Nectary cylindrical, acute, as long as the corolla; segments of



the calyx oblong;" tube of the corolla purple, border deep blue, unequally cleft; plant smooth; capsule ovate. May. Britain. P.

3. P. Alpina. *Alpine Butterwort*. "Nectary conical, reflexed, shorter than the petals; capsule oblong, beaked;" corolla white, palate yellow, segments unequal. June. Switzerland. 1794. P.

XI. CALCEOLA'RIA, from Calceolus, a little slipper, it bearing a fanciful resemblance to a shoe. Nat. ord. Linn. Corydales. Juss. Scrophulariæ. 9 Species.

1. C. Pinna'ta. *Wing-leaved Slipperwort*. "Leaves pinnate," opposite, brittle, upper surface downy, lower somewhat viscid; stem erect, two feet, branched, pubescent, jointed; corolla yellow, upper lip roundish, inflated; a delicate and tender plant. June to September. Peru. 1773. A. Gr. Ho.

XII. UTRICULA'RIA, *Utriculus*, a little bottle or bladder, from some such shaped appendages to the leaves. Nat. ord. Linn. Corydales. Juss. Lysimachia. 11 Species.

1. U. Vulga'ris. *Common Bladderwort*. "Nectary conical; scape few flowered; upper lip of the corolla reflected at the sides;" leaves bristly, bearing numerous little oval bladders; flowers large, handsome, yellow; calyx purplish. June. Britain.

2. U. Mi'nor. *Smaller Bladderwort, or Hooded*



*Milfoil*. "Nectary keeled, very short, obtuse;" stalk with few flowers; corolla not closed; plant more tender than the last; leaves very small, with numerous bladders; flowers smaller, paler. July. Britain. P.

All the plants of this genus are more or less aquatic; none of the foreign sorts have yet been introduced with success into England. New Holland abounds with many beautiful species.

XIII. LYCOPUS, from *λυκος* a wolf, and *πους* a foot. Nat. ord. Linn. Verticillatæ. Juss. Labiatæ. 3 Species.

1. L. Virgin'icus. *Virginian Water Horehound*. "Leaves stalked, elliptical, tapering at each end, equally serrated;" flowers numerous, in dense whorls, purplish. August. Virginia. 1640. P.

2. L. Exalta'tus. *Italian Water Horehound*. "Leaves wing-cleft, toothed; calyx four or five cleft;" stem from four to six feet, leafy; leaves opposite, in cross pairs; whorls axillary, sessile, many flowered; corolla tubular, white; mouth hairy. July. Italy. 1739. P.

3. L. Europæ'us. *Water Horehound, or Gipsy-wort*. "Leaves very deeply serrated," opposite; stem square; flowers white, many in a whorl; leaves sometimes wing cleft. July. Britain. P.

XIV. AMETHYS'TEA, from the amethystine colour of the flowers. Nat. ord. Linn. Verticillatæ. Juss. Labiatæ. 1 Species.



1. *A. Cæru'lea. Blue Amethyst.* Leaves small, three cleft, serrate, dark green; upper part of the branches blue; flowers small, in umbels, fine blue. July. Siberia. 1759. A.

XV. ZIZI'PHORA, a mongrel name, composed from zizi, an Indian word, the meaning of which is not ascertained, and φέρω, to bear. Nat. ord. *Linn.* Verticillatæ. *Juss.* Labiatæ. 4 Species.

1. *Z. Capita'ta. Oval-leaved, or Headed Ziziphora.* "Flowers clustered; leaves ovate; stem pubescent;" corolla with a white tube, and pale purplish border just emerging from the slender calyx. August. Syria. 1752. A.

2. *Z. Tenu'ior. Spear-leaved Ziziphora.* "Flowers lateral, in whorls, on foot-stalks;" leaves egg lance-shaped, acute, entire; corolla pale purplish, as in the former species, externally hairy; calyx hairy. July. The Levant. 1752. A.

3. *Z. Acinoï'des. Basil-leaved Ziziphora.* "Flowers axillary; calyx hairy; leaves ovate, stalked, somewhat serrate;" stems diffuse; corolla hairy, light purple or lilac; anthers large, purple. August. Siberia. 1752. P.

These are aromatic herbs, with the habit of Thyme and Basil; but distinguished by a long and slender calyx as well as by having only two stamens, though sometimes two others without anthers are found; the plants are rarely seen, unless in botanic gardens.



XVI. *MONARDA*, from Nicholas Monardes, a physician of Seville, died 1578; he wrote on the materia medica of the new world. Nat. ord. *Linn.* Verticillatæ. *Juss.* Labiatæ. 7 Species.

1. *M. Fistulosæ*. *Purple Canada Monarda*. "Leaves egg lance-shaped, pointed, hairy, flat; stems obtusely angular," nearly three feet high, branched at the upper part; flowers in dense whorls, of a beautiful crimson, fragrant. June to August. Canada. 1656. P.

2. *M. Oblongata*. *Long-leaved Monarda*. "Leaves oblong, lanceolate, rounded, somewhat contracted at the base, hairy, flat;" calyx and leaves more hairy than in the preceding, the flowers also are smaller. July to September. North America. 1761. P.

3. *M. Didyma*. *Scarlet Monarda, or Oswego Tea*. "Leaves ovate, smooth; whorls of flowers in heads, sometimes with two additional imperfect stamens; stem acutely angular," bushy at the top; leaves opposite, on short stalks, toothed and fringed at the edge, when bruised emitting a grateful smell; corolla bright scarlet. June to August. North America. 1752. P.

4. *M. Rugosa*. *White Monarda*. "Leaves ovate, lanceolate, heart-shaped, glossy, wrinkled," like those of sage; corolla white. July to September. North America. 1761. P.

5. *M. Clinopodia*. *Basil-leaved Monarda*. "Leaves egg lance-shaped, smooth, rounded and unequal at



the base," opposite, serrate; flowers in heads, terminal, pale, purplish; floral leaves coloured at the base. July. Virginia. 1771. P.

6. *M. Punctata*. *Spotted Monarda*. "Flowers in whorls; corolla spotted; floral leaves large and coloured;" leaves stalked, lanceolate, in clusters at each joint, smooth, veined; flowers axillary, yellow, spotted with purple; floral leaves crimson. June to October. North America. 1714. B.

7. *M. Ciliata*. *Fringed Monarda*. "Leaves oblong; flowers in heads, whorled; floral leaves fringed;" stems jointed, hairy, lower leaves stalked, upper ones sessile; corolla large, blue, with dark purple spots. The plant has the smell of mint. July. Virginia. 1798. P.

XVII. *ROSMARINUS*, from *ros* dew, and *marinus*, as loving maritime situations, particularly the Mediterranean. Nat. ord. *Linn.* Verticillatæ. *Juss.* Labiatæ. 2 Species.

1. *R. Officinalis*. *Common Rosemary*. "Leaves sessile," opposite, linear, oblong, revolute at the edge, dark green above, downy and veined beneath, numerous; stem much branched; flowers on short stalks, axillary, blue or whitish. February to May. South of Europe. 1596. E. S.

Var. 1. *Gold-striped Rosemary*, leaves with yellow stripes.

Var. 2. *Silver-striped Rosemary*, leaves with white stripes.



The cultivation of this shrub in England is probably of very ancient date ; though, like many others, it is difficult to trace beyond the time of Gerarde in 1596. Rosemary yields a thin essential oil in distillation, of great fragrancý ; it is a principal ingredient in the composition called Hungary Water, and is recommended in defective excitement of the nerves and brain, consequently it is supposed to strengthen the memory, according to Ophelia's doctrine, " There's Rosemary, that's for remembrance."

XVIII. SAL'VIA, from *salvere*, to be in health, on account of its supposed sanative qualities. Nat. ord. *Linn.* Verticillatæ. *Juss.* Labiatæ. 76 Species.

1. *S. Ægypti'aca.* *Egyptian Sage.* " Leaves lance-shaped, toothed ; whorls of a few stalked flowers ;" stem bushy, about a foot high ; corolla pale purplish ; under lip dotted. July. Egypt. 1770. A.

2. *S. Cre'tica.* *Cretan Sage.* " Leaves lance-shaped, crenate ; calyx divided to the base ; styles two ;" stem shrubby. A variety perhaps of *S. Officinalis*. June to August. Isle of Candia. 1760. S.

3. *S. Lyra'ta.* *Lyre-leaved Sage.* " Root leaves lyre-shaped, toothed ; helmet of the corolla very short ;" the whole plant hairy, of a dusky purple ; whorls several, six flowered ; corolla pale blue. June to August. North America. 1728. P.

4. *S. Officina'lis.* *Garden Sage.* " Leaves egg lance-shaped, finely crenate ; whorls of a few flowers ; calyx sharply pointed ;" stem shrubby ; leaves dull green, often purplish, sometimes variegated or striped,



wrinkled; corolla blue, upper lip blunt. July. South of Europe. 1597. S.

5. *S. Grandiflora*. *Broad-leaved Balsamic Sage*. "Leaves heart-shaped, oblong, crenate, woolly; whorls many flowered; calyxes acute;" stems much branched, hairy; whorls of flowers distant; corolla pale blue. July. South of Europe. 1759. P.

6. *S. Triloba*. *Three-lobed, or Sage of Virtue*. "Plant woolly; leaves stalked, three-lobed, middle lobe oblong, extended, side lobes egg-shaped, blunt, all much wrinkled;" spikes long; whorls numerous; corolla pale purple. July. South of Europe. 1596. S.

7. *S. Pomifera*. *Apple-bearing Sage*. "Leaves lance egg-shaped, waved, crenate, hoary, veined, heart-shaped at the base; calyx three-lobed, bluntish;" stem shrubby, from two to three feet high; flowers large, pale lilac, in whorls, at the end of each branch. July, August. Isle of Candia. 1699. S.

8. *S. Horminum*. *Red-topped Sage, or Annual Clary*. "Leaves obtuse, crenate; calyx reflected when in seed; branches at the summit without flowers, but with deeply coloured bractes," red or purplish; corolla blue, or purplish red. June and July. South of Europe. 1597. A.

Var. 1. *S. Viridis*, or *Green-topped sage*. Bractes green.

9. *S. Virgata*. *Long-branched Sage*. "Leaves oblong, heart-shaped, wrinkled, crenate; hairs of the



stem and calyx glandular at the top;" stems about four feet high, having long branches growing in acute angles, terminating in long spikes of flowers, white or pale rose coloured, sometimes bluish. July to November. Pyrenees. 1758. P.

10. *S. Sylves'tris. Spotted-stalked Bohemian Sage.* "Leaves heart-shaped, wrinkled, doubly serrate; floral leaves pointed, coloured, shorter than the flower; hairs of the stem and calyx simple;" stems about three feet high; leaves spotted with white dots; corolla bluish. August. Austria. 1759. P.

11. *S. Nemoro'sa. Spear-leaved Sage.* "Leaves heart lance-shaped, serrated, flat; bractes coloured; lower lip of the corolla reflected;" stems eighteen inches high; spikes before opening exactly square; corolla blue, with impalpable dots. August. Austria. 1728. P.

12. *S. Visco'sa. Clammy Sage.* "Leaves oblong, obtuse, gnawed, crenate, clammy; flowers in whorls; floral leaves cordate, acute;" corolla purple, lower lip paler. June. Italy. 1773. P.

13. *S. Hæmato'des. Italian bloody Sage.* "Leaves egg heart-shaped, wrinkled, woolly; calyx hispid; root tuberous;" root leaves six inches long, eared at the base; stalks about four feet, having at their end loose spikes of purplish flowers; whole plant hispid. August. Italy. 1699. P.

14. *S. Praten'sis. Meadow Sage, or Clary.* "Leaves heart-shaped, oblong, crenate, uppermost stem-clasp-



ing ; bractes minute ; helmet of the corolla glutinous ;" flowers large deep blue, in numerous whorls ; calyx with three small teeth to its upper lip. May to November. England. P.

15. S. Bi'color. *Two-coloured Sage*. " Leaves egg-shaped, gnawed, toothed ; flowers nodding ; middle segment of the lower lip of the corolla concave ;" upper lip sickle-form, woolly, violet blue, often dotted, the lower lip white ; stem pubescent ; flowering branches rod-like. June and July. Barbary. 1793. P.

16. S. In'dica. *Indian Sage*. " Lower leaves heart-shaped, lobed at the sides, stalked, upper leaves sessile ; whorls almost naked, very remote ;" stem weak and slender ; flowers large, beautiful ; helmet of the corolla arched and blue, lower lip white in the middle and speckled. May to July. India. 1731. P.

17. S. Verbena'ca. *Wild English Clary*. " Leaves serrated, sinuate, smooth ; corolla narrower than the calyx ;" stem decumbent at the base ; calyx purplish, slightly viscid ; flowers small, violet coloured. June to September. England. P.

18. S. Clandesti'na. *Cut-leaved Sage*. " Leaves serrated, wing-cleft, very rugged ; spike blunt ; corolla narrower than the calyx ;" stems leafy, woolly, numerous, a span high ; leaves hoary, narrow ; calyx pointless ; corolla darkish blue. May to July. Italy. 1739. P.

19. S. Austri'aca. *Austrian Sage*. " Leaves



ovate and heart-shaped, gnawed, sinuate; root-leaves stalked; stem leafless, simple; stamens twice as long as the corolla;" flowers white or pale yellow. July. Austria. 1776. P.

20. *S. Diser'mas. Long-spiked Sage.* "Leaves heart-shaped, oblong, gnawed; stamens equalling the corolla;" plant pubescent, hairs glutinous at the tip; corolla white. July. Syria. 1773. P.

21. *S. Nilo'tica. Nile Sage.* "Leaves sinuate, angular, crenate, toothed; teeth of the calyx spiny, edges fringed;" leaves firm, wrinkled, hairy; whorls remote, three flowers on each side; floral leaves sharp pointed, hairy; flowers blue, with a narrow tube and small helmet. July. Egypt. 1780. A.

22. *S. Mexica'na. Mexican Sage.* "Leaves oval, acuminate at both ends;" stems shrubby, eight or ten feet high; leaves thin, pale green, on slender foot-stalks; flowers in close thick spikes of a fine blue. July. Mexico. 1724. S. Gr. Ho.

23. *S. Formo'sa. Shining-leaved Sage.* "Leaves heart-shaped; helmet of the corolla bearded; calyx three-lobed; stem shrubby," about six feet high; corolla of a bright scarlet, large, upper lip straight, lower lip roundish, three-cleft. July. Peru. 1783. S. Gr. Ho.

24. *S. Hispa'nica. Spanish Sage.* "Leaves ovate; foot-stalks sharp at both ends; spike tiled; calyxes three cleft;" leaves wrinkled, serrate; corolla blue,



lower lip three-cleft, blunt, with pale spots at the base. August. Spain. 1739. A.

25. *S. Verticilla'ta. Whorl-flowered Sage.* "Leaves heart-shaped, crenate, toothed; whorls almost naked; style resting on the under lip of the corolla;" stems about two feet and a half high, having at each joint two leaves; spike a foot long; flowers blue. June to October. Germany. 1658. P.

26. *S. Rapifo'lia. Rape-leaved Sage.* "Leaves heart-shaped, crenate, toothed; lower leaves halbert and lyre-shaped; whorls almost naked; upper lip of the corolla short;" flowers deep purple; the general appearance of the plant much like the last. July. Italy. 1776. P.

27. *S. Glutino'sa. Yellow Sage.* "Leaves heart arrow-shaped, serrate, acute," stalked, palish; stems about four feet high, upper part closely set with large yellow flowers in whorls; whole plant clammy. The flowers are used in Holland to give a flavour to the Rhenish wines. June to October. Germany. 1596. P.

28. *S. Au'rea. Gold-flowered African Sage.* "Leaves roundish, glaucous, lower ones abrupt and toothed, upper entire; calyx hairy;" stem shrubby; leaves silvery, smaller than the flowers, which are brownish yellow, smelling like tamarinds. May to October. The Cape. 1731. S. Gr. Ho.

29. *S. Scla'rea. Common Clary.* "Leaves oblong, heart-shaped, wrinkled, downy, serrated; floral



leaves coloured, longer than the calyx, concave, pointed;" leaves large as the hand, viscid, strong scented; flowers in loose terminating spikes, pale blue, variegated often with purple and yellowish white. July to September. Syria. 1562. P.

30. *S. Ceratophyl'la. Horn-leaved Sage.* "Leaves wrinkled, wing-cleft, woolly; uppermost whorls without flowers;" leaves thick, eight inches long, cleft somewhat like a stag's horn; corolla white. August. Persia. 1699. P.

A sort of intermediate species between this and *S. Clandestina*, is called *S. Ceratophilloides*.

31. *S. Æthi'opis. Woolly Sage.* "Leaves oblong, gnawed, woolly; whorls woolly; floral leaves curved, somewhat thorny;" stem woolly; upper lip of the corolla pale blue, pubescent, lower lip white, middle segment forming a sort of bag. June. Austria. 1570. B.

32. *S. Argente'a. Silvery-leaved Sage.* "Leaves oblong, angular, toothed, woolly; upper whorls without flowers; floral leaves concave;" stem hoary, branched; whorls of flowers large, all turned one way, white, their palate yellowish. May to August. Isle of Candia. 1759. B.

33. *S. Pinna'ta. Wing-leaved Sage.* "Hairy and viscid; leaves interruptedly pinnate, with oblong, jagged leaflets, unequal at the base; calyx inflated;" flowers in distant whorls, with both calyx and corolla deep blue. July. The Levant. 1731. B.



34. *S. Forska'lii.* *Forskal's Sage.* "Leaves lyrate, eared; stem nearly leafless; helmet of the corolla cloven;" calyx with clammy hairs; flowers whorled, numerous, large, purple; palate white, with purple dots and streaks. July and August. The Levant. 1800. P.

35. *S. Nu'tans.* *Nodding Sage.* "Leaves heart-shaped, gashed at the base into five indistinct lobes; stem roundish; spikes drooping before flowering." A plant much resembling the last species. June to September. Russia. 1780. P.

This very numerous genus not being divided into sections, presents some difficulties in searching out a particular species. The peculiar forking of the two filaments is the essential character, but there are rudiments of two other, though abortive, stamens in the throat of the corolla. Formerly numbers 4, 5, 6, were much used as tea, for the purpose of assisting digestion, and were supposed to possess much antiseptic virtue; at present their use is nearly confined to the kitchen, as a sauce for strong meats. From *S. Sclarea* when in flower, is made Clary wine, possessing somewhat the flavour of Frontinac, and which is slightly narcotic. *S. Pomifera* derives its name from the galls produced on its shoots by the attack of an insect of the *Cynips* genus; in the Levant these galls are an inch in diameter, full of juice, and when candied with sugar are much esteemed. *S. Officinalis*, and *S. Triloba*, produce somewhat similar excrescences. The seeds of *S. Verbenaca* are smooth, and produce a great quantity of mucilage when moistened; whence it is said they become serviceable in removing extraneous matter from the eyes; and some old writers



have ridiculously derived the English name Clary, q. d. Clear-eye, from this circumstance.

XIX. CUNI'LA, supposed to be from the resemblance of the flowers growing in a head, to a cone. Nat. Ord. *Linn.* Verticillatæ. *Juss.* Labiatæ. 5 Species.

1. C. Maria'na. *Mint-leaved Cunila*. "Leaves egg-shaped, serrate; corymbs terminal, forked;" stems about a foot high; leaves opposite, sessile, acute; flowers small, purplish; plant smelling like Penny-royal. August. North America. 1760. P. A variety, scentless.

2. C. Pulegioïdes. *Pennyroyal-leaved Cunila*. "Leaves oblong, twice-toothed; flowers in whorls;" stem pubescent, branched; calyx rough; corolla white, with a violet coloured throat. A strong scented plant. August. North America. 1777. A.

3. C. Thymoi'des. *Thyme-leaved Cunila*. "Leaves oval, very entire; flowers in whorls; stem four cornered;" the habit of the preceding; leaves obtuse, scored underneath; whorls the whole length of the stem; corolla bluish. August. Montpellier. 1699. A.

These plants are somewhat aromatic, and resemble in construction those of the class Didynamia. Cunila has two abortive stamens without anthers.

XX. COLLINSO'NIA, in honour of Peter Collinson, Esq. F.R.S. who died 1768; a distinguished pro-



moter of Botany, who first introduced this plant, with many others, to the English garden. Nat. ord. *Linn.* Personatæ. *Juss.* Labiatæ. 2 Species.

1. *C. Canaden'sis.* *Nettle-leaved Collinsonia.* "Leaves egg-shaped, smooth; stems smooth," three or four feet high; leaves six inches long, opposite, on foot stalks; flowers yellowish, numerous, in panicked racemes. August. North America. 1735. P.

This plant has a peculiar, strong but agreeable smell; at New York it is called Horse-weed, because horses eat it in the spring before other plants come up.

XXI. FONTANESIA, so called in honour of M. Desfontaines, author of the *Flora Atlantica*. Nat. ord. *Linn.* Sepiariæ. *Juss.* Jasminæ. 1 Species.

1. *F. Phillyræoides.* *Phillyrea-leaved Fontanesia.* Leaves ovate, oblong, opposite, evergreen, veined underneath; foot-stalks short; flowers in bunches, axillary, greenish yellow; stem from ten to twelve feet. The plant is cultivated rather for curiosity than ornament. August. Syria. 1767. E. S.

XXII. CIRCÆA, from Circe the famous enchantress. Nat. ord. *Linn.* Aggregatæ. *Juss.* Onagræ. 2 Species.

1. *C. Lutetia'na.* *Common Enchanter's Nightshade.* "Stem erect; leaves egg-shaped, finely toothed, opaque, pubescent," opposite, dark green;



flowers white or reddish, in terminal bunches. July and August. England. P.

2. *C. Alpina*. *Mountain Enchanter's Nightshade*. "Stem prostrate, much branched; leaves heart-shaped, serrate, shining; calyx membranous;" plant smaller, smoother; leaves pale green; flowers reddish; calyx white, with reddish tips. June to September. Britain. P.

These plants are not often cultivated; the first, however, frequently springs up as a common weed in gardens.



## CLASS III.

## TRIANDRIA.

*Order Monogynia.*1. *Flowers superior.*

I. VALERIANA. Calyx none; corolla one petal, five-cleft, gibbous at the base; seed one.

II. CROCUS. Corolla six-parted, equal; tube very long; stigmas spirally twisted, coloured.

III. GLADIOLUS. Corolla coloured, six-parted, irregular, unequal; three upper segments converging; stigmas three.

IV. IRIS. Corolla six-parted; alternate segments reflected; stigmas like petals.

V. IXIA. Corolla one-petaled, tubular, tube straight, border six-parted, nearly equal, bell-shaped; stigmas three, sometimes six.

2. *Flowers inferior, not glumaceous or grass-like.*

VI. COMMELINA. Corolla of six petals, three, calyx-like; nectaries three, cross-shaped, on pedicles, resembling stamens.

VII. LOEFLINGIA. Calyx five-leaved; corolla five-petaled, very small; capsule one-celled, three-valved.

VIII. CNEORUM. Calyx three-toothed; corolla three petals, equal; berry three-grained.



IX. ORTEGIA. Calyx five-leaved; corolla none; capsule five-celled; seeds very numerous.

X. POLYCNEMUM. Corolla none; calyx three or five-leaved; seed one, almost naked.

3. *Flowers inferior, glumaceous or grass-like.*

XI. CYPERUS. Corolla none; glumes of the calyx chaff-like, tiled in two rows; seed one, naked.

XII. SCIRPUS. Corolla none; calyxes chaffy, tiled on every side; seed one, naked.

*Order Digynia.*

*Grasses.*

1. *Calyxes one-flowered, scattered.*

XIII. PANICUM. Calyx two-valved, unequal, two-flowered, the outer flower male or neuter; corolla cartilaginous, investing the seed.

XIV. PHALARIS. Calyx two-valved, keeled, equal, one-flowered, inclosing the double corolla.

XV. STIPA. Calyx two-valved, one-flowered; outer valve of the corolla with a very long terminating awn, jointed at the base.

XVI. LAGURUS. Calyx two-valved, one-flowered; awns feathery; outer valve of the corolla with two terminating awns, and one dorsal awn twisted back.

XVII. SACCHARUM. Calyx two-valved, surrounded externally with long woolly hairs; corolla two-valved, sometimes wanting.



2. *Calyxes two-flowered, scattered.*XXIII. *Holcus.*3. *Calyxes many-flowered, scattered.*

XVIII. BRIZA. Calyx two-valved; spikelets two-rowed; corolla two-valved, bellying, valves heart-shaped, obtuse; seed growing to the corolla.

XIX. AVENA. Calyx two-valved; outer valve of the corolla with a twisted awn on the back.

XX. ARUNDO. Calyx two-valved; corolla two-valved, awnless, surrounded with a permanent wool.

4. *Flowers forming a spike, on a long and slender receptacle.*

XXI. SECALE. Calyx solitary, opposite, two-valved, two-flowered.

XXII. TRITICUM. Calyx solitary, two-valved, many-flowered, on a zigzag, toothed receptacle.

XXIII. HORDEUM. Calyxes three together, lateral, two-valved, one-flowered.

*Order Trigynia.**Flowers inferior.*

XXIV. MOLLUGO. Calyx five-leaved; corolla none; capsule three-celled, three-valved; seeds numerous.

XXV. MINUARTIA. Calyx five-leaved; corolla none; capsule one-celled, one-valved; seeds not numerous.



XXVI. KOENIGIA. Calyx cleft into three deep segments; corolla none; seed one, ovate, naked.

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CLASS III.

TRIANDRIA.

*Order Monogynia.*

1. VALERIA'NA, by some authors said to be derived from Valerius, a physician, by others from *valere*, to be well, on account of its medical virtues. Nat. ord. *Linn.* Aggregatæ. *Juss.* Dipsacææ. 31 Species.

\* *Seed single, downy.*

1. V. Ru'bra. *Red Valerian.* "Flowers monandrous, tailed; leaves lanceolate, entire," upper leaves often toothed; plant smooth; flowers red, rarely white, growing in a dense corymbus; common on old walls. England, France. June to September. P. V. *Angustifolia*, with narrower leaves, is perhaps a variety of this.

2. V. Calci'trapa. *Cut-leaved Valerian.* "Flowers monandrous; corolla slightly spurred; leaves wing-cleft and sessile;" flowers in a corymbus, small, rose-coloured. May. Portugal. 1683. A.

3. V. Dioi'ca. *Small, or Marsh Valerian.* "Flowers triandrous, diœcious; radical leaves ovate, stem leaves



pinnate;" stems six or eight inches high; flowers bluish-coloured, in dense, forked panicles; the male plant smaller. June. England. P.

4. *V. Officina'lis*. *Great Wild Valerian*. "All the leaves pinnate; leaflets lanceolate, serrate, nearly uniform;" stem three or four feet high; flowers numerous, flesh-coloured, in a large corymbus; seed with a feathery down. In a dry soil the plant is smaller. June to September. England. P.

5. *V. Phu*. *Garden Valerian*. "Root leaves elliptical, undivided; stem leaves wing-cleft, somewhat lyrate;" stems three or four feet high; leaves spreading; flowers numerous, pale, purplish, bluish-coloured. July. Germany. 1597. P.

6. *V. Tripteris*. *Three-leaved Valerian*. "Leaves toothed; root leaves heart-shaped, simple; stem leaves ternate, middle leaflet ovate, lateral leaflets lanceolate;" flowers numerous, white, in loose corymbs; seeds downy. May. Switzerland. 1739. P.

7. *V. Monta'na*. *Mountain Valerian*. "Leaves ovate, oblong, simple, unequally toothed, the lower ones long-stalked; stem simple, rather downy;" flowers in a corymb, white or purplish; much a-kin to the last species, but its leaves being always simple sufficiently distinguish it. June. Switzerland. 1748. P.

8. *V. Cel'tica*. *Celtic Valerian*. "Leaves oblong, obtuse, entire, smooth, rather fleshy;" sometimes it has two stem leaves, linear, sessile, opposite; stem



four or five inches high, terminating with a few small whitish flowers, in a corymb. June. Switzerland. 1739. P.

9. V. Tuberosa. *Tuberous-rooted Valerian*. "Root leaves lanceolate, ovate, undivided, those of the stem wing-cleft;" stem simple; flowers reddish, in a dense corymbus. May. South of Europe. 1739. P.

10. V. Saxatilis. *Rock Valerian*. "Leaves simple, undivided; radical leaves elliptic, three-ribbed, hairy; stem leaves linear, corymb bunch-like;" flowers few, white, each tuft supported by a long stalk. July. Austria. 1748. P.

11. V. Pyrenaica. *Pyrenean Valerian*. "Stem-leaves heart-shaped, serrated, all stalked, the upper pinnate or ternate;" stem downy about the summit, from three to five feet high; leaves large; flowers with very short spurs, rose-coloured, in a dense, compound corymbus. May. The Pyrenees, also in Scotland. P.

\*\* *Fruit three-celled, crowned.*

*By some writers, the species of this section form a distinct genus, called Fedia.*

12. V. Sibirica. *Siberian Valerian*. "Flowers with four stamens; leaves ovate, fleshy, wing-cleft, toothed; seeds fastened to an oval chaff;" stem branched, branches terminating in a sort of umbel, with bright yellow flowers. July. Siberia. 1759. A. V. Ruthenica, or *Russian Valerian*, differs only in being perennial.



13. *V. Cornuco'piæ. Purple Valerian.* "Flowers with two stamens; leaves egg-shaped, sitting; corolla ringent;" root leaves on long foot-stalks, stem leaves nearly sitting; flowers in a three-forked cyme; corolla purple. June. South of Europe. 1596. A.

14. *V. Olito'ria. Corn Salad, or Lamb's Lettuce.* "Flowers triandrous; stem two-forked; leaves linear, obtuse;" flowers bluish white; stem a span high. April. England. A.

Varieties: 1. Having the leaves acute; 2. broad; 3. upper leaves serrated; 4. lower leaves jagged; 5. a taller plant, seeds round.

15. *V. Denta'ta. Tooth-seeded Corn Salad.* "Flowers triandrous; stem forked; leaves lanceolate, very entire; fruit three-toothed, two teeth very short;" flowers as in the last species, but with a sessile floret at each fork of the stem. June. England. A.

These two species were formerly considered as merely varieties of a species called *V. Locusta*; and perhaps *V. Vesicaria*, the Bladder-cropped, and *V. Coronata*, or hook-seeded Valerian, may be viewed in the same light. The roots of most of the species of Valerian are distinguished by a potent and very peculiar odour, highly attractive to the feline race. *V. Officinalis* has been long in repute as a remedy in nervous disorders, but now somewhat on the decline; very early in the spring the leaves of the last two species afford an agreeable salad.

II. *CRO'CUS*, *κροκκ*, a thread, from the largeness of the stamens; there is in Ovid a story of the youth



*Crocus*. Nat. ord. *Linn.* *Ensatae*. *Juss.* *Irides*.  
2 Species.

1. *C. Sativus*. *Common Saffron*. "Leaves narrower, rolled in at the edges; stigma three-cleft to a considerable length," deep orange-coloured, of an aromatic odour; corolla deep purple. September. England. P.

2. *C. Vernus*. *Spring Crocus*. "Leaves broader, with flat edges; stigma much less deeply three-cleft;" corolla of various colours, white, purple, yellow, and variegated. February. England. P.

Linnaeus united both these species: on the other hand, some botanists have erected several varieties of each into separate species, formed on very nice distinctions. The stigmas of *C. Sativus* carefully picked, and gently dried in a kiln, then carefully pressed into a cake, are the saffron of the shops; the plant was formerly much cultivated in Essex, about the neighbourhood of Saffron Walden.

III. *GLADIOLUS*, diminutive of *gladius* a sword, from the form of the leaves. Nat. ord. *Linn.* *Ensatae*. *Juss.* *Irides*. 50 Species.

1. *G. Communis*. *Common Corn Flag*. "Leaves sword-shaped; flowers distant;" spike of flowers in one row; corolla somewhat bell-shaped, red, flesh-coloured, or white. June. South of Europe. 1596. P.

Var. 1. *Byzantinus*. *Turkish Corn Flag*. Flowers larger; spike two-rowed.

This genus contains many handsome green-house spe-



cies, particularly the *G. Cardinalis*, stem three or four feet high, with fine scarlet flowers, having a white spot on the lower lip.

IV. *IRIS*, the rainbow, from the brilliancy of its colours. Nat. ord. *Linna.* *Ensatae.* *Juss.* *Irides.* 54 Species.

\* *Corolla bearded; leaves sword-shaped.*

1. *I. Susia'na.* *Chalcedonian Iris.* "Stem one-flowered, longer than the leaves; petals rounded;" corolla the largest of all the species, very dark purple, striped with white. April. The Levant. 1596. P.

2. *I. Pu'mila.* *Dwarf Iris.* "Stem one-flowered, shorter than the leaves; petals oblong, blunt;" corolla blue or purple, varying into a pale red or yellow; stigmas deeply two-cleft. April. Austria. 1596. P.

Var. 1. *I. Lutescens.* *Yellow Dwarf Iris.*

3. *I. Florenti'na.* *Florentine Iris.* "Stem higher than the leaves, mostly two-flowered;" corolla whitish; claws of the petals greenish on the outside; stigmas snowy white. May. South of Europe. 1596. P.

4. *I. Biflo'ra.* *Twice-flowering Iris.* "Stem longer than the leaves, three-flowered;" petals of the corolla violet-coloured, entire. April, May, and again in Autumn; whence its name, which properly should have been *Bifera.* South of Europe. 1596. P.

5. *I. Aphy'lla.* *Leafless Iris.* "Stem naked, same height as the leaves;" flowers three or four, large



and bright purple, standing over each other; sheaths purple. May. Native country not known. 1748. P.

6. I. *Variegata*. *Variegated Iris*. "Stem many-flowered, somewhat leafy, the same length as the leaves;" flowers coming out successively, yellow, netted with black. June. Hungary. 1597. P.

7. I. *Germanica*. *German Iris*. "Stem many-flowered, higher than the sickle-formed leaves," which are large, sheathing each other at the base, divided into several branches, each supporting three or four flowers of an agreeable scent; three bending petals of the corolla faint purple, with blue veins; beard yellow, three erect petals, bright blue. May. Germany. 1596. P.

8. I. *Lu'rida*. *Dingy Iris*. "Stem higher than the leaves; many-flowered; outer petals rolled back," dark purple with yellowish stains; beard yellow; inner petals somewhat bent in, notched, with a purplish border and dirty yellow claw; stigmas dingy purple and yellow. April. South of Europe. 1758. P.

9. I. *Sambuci'na*. *Elder-scented Iris*. "Stem higher than the leaves; many-flowered; the reflected petals flat, notched," larger petals deep violet, smaller blue; colours darker than in No. 7, which it much resembles; smells like elder in bloom, whence its name. May. South of Europe. 1748. P.

10. I. *Squa'lens*. *Brown-flowered Iris*. "Stem higher than the leaves, many-flowered; reflected petals bent down and folded back in the middle,"



violet-coloured with yellowish veins; upright petals and stigmas of a squalid yellow colour, and notched. June. South of Europe. 1768. P.

11. *I. Crista'ta.* *Crested Iris.* "Beard crested; stem generally one-flowered, the length of the leaves; germ three-cornered; petals nearly equal," of a pale purplish blue; the reflected petals with deeper blue spots; in place of the beard, three raised waved ribs, variegated with orange and yellow. May. North America. 1756.

12. *I. Dicho'toma.* *Forked Iris.* "Stem round, lengthened to a panicle;" branches simple, spreading, alternate, three or four flowered; flowers on long peduncles, pale purple, the smallest of any in the genus. August. Siberia. 1784. P.

\*\* *Corolla beardless; leaves sword-shaped.*

13. *I. Xi'phium.* *Small bulbous-rooted Iris.* "Leaves awl-shaped at the top, channelled throughout, shorter than the two flowered stems;" scent pleasant; petals notched, commonly blue, but there are varieties, purple, white, yellow, or variegated. June. South of Europe. 1596. P.

Var. 1. *I. Xiphioides.* *Great Bulbous-rooted Iris.*

14. *I. Pseuda'corus.* *Yellow Iris, or Water Flag.* "Interior petals smaller than the stigmas;" corolla yellow; anthers yellow, with a purplish edge; stigmas cut into fringed segments at the top. June. Britain. P.



15. *I. Foetidissima*. *Stinking Iris, or Gladwyn*. "Interior petals spreading widely; stem with one angle;" corolla of a purplish ash-colour, streaked with black; leaves, when broken, smelling like rancid bacon. June. Britain. P.

16. *I. Virginica*. *Virginian Iris*. "Stem two-edged," sheathed with alternate leaves; many-flowered, flowers elegant, but without scent; outer petals blunt, blue, with deep streaks, pale blue at the base; inner petals shorter, streaked, more deeply blue; stigmas cleft. June. North America. 1758. P.

17. *I. Versicolor*. *Various coloured Iris*. "Germ nearly three cornered; stem columnar, winding or crooked," many-flowered; flowers blue, large. June. North America. 1732. P.

18. *I. Ochroleuca*. *Pale Yellow Iris*. "Germ six-angled; stem somewhat columnar," many-flowered, longer than the leaves; leaves scored; larger petals with dusky veins, smaller petals and stigmas snowy white. July. The Levant. 1759. P.

\*\*\* *Corolla beardless; leaves linear.*

19. *I. Sisyrinchium*. *Crocus-rooted Iris*. "Leaves reflexed, waved; stem one-flowered," very short; whole plant small; root two bulbs placed on each other; petals purple, with a yellow spot in place of a beard. May. South of Europe. 1597. P.

20. *I. Verna*. *Spring Iris*. "Leaves flat, grass-like, longer than the one-flowered stem; root fibrous;"



alternate petals equalling the others, purple and blue. May. North America. 1739. P.

21. *I. Persica*. *Persian Iris*. "Stem one-flowered; inner petals very short and spreading;" flower stalk about three inches long; corolla sky-blue; reflected petals, with a yellow line along the middle, and violet dots; plant much esteemed for its beauty and sweetness. March. Persia. 1629. P.

22. *I. Graminea*. *Grass-leaved Iris*. "Stem two-edged; germ six-angled;" leaves narrow, flat, grass-like; flowers two or three, small; three reflected petals, light purple striped with blue, with a convex ridge, the three others of a reddish purple, all having a broad yellow line; scent like fresh plums. June. Austria. 1597. P.

23. *I. Spuria*. *Spurious Iris*. "Stem columnar, commonly three-flowered; germ six-angled;" leaves narrow; corolla blue, purple, under the stigmas inclined to red. May. Germany. 1759. P.

24. *I. Sibirica*. *Siberian Iris*. "Germ three-angled; stem columnar," three-flowered, or more; flowers blue, in brown skinny sheaths; leaves narrow; it is often confounded with No. 22, but it is taller. May. Siberia. 1596. P.

25. *I. Martinicensis*. *Martinico Iris*. "Germ three-cornered; petals with little glandular cavities at the base;" flowers few, yellow, with a black shining gland, scentless. June. Martinico. 1760. P. Gr. Ho.



26. *I. Tuberosa*. *Snakes-head Iris*. "Root tuberous; leaves four-cornered;" stem one-flowered; petals dark purple, small. April. The Levant. 1597. P.

*Iris* is a large and very natural genus, most of the species are shewy and beautiful, and easily propagated. The dried root of *I. Florentina* is the Orris root of the shops, esteemed for its pleasant perfume; the fresh roots of Nos. 7, 14, and 15, were formerly in use as a powerful cathartic.

v. *IX'IA*, ἰξία, the Greek name of the Misseltoe; it does not appear why Linnæus adopted it for the present genus. Nat. ord. *Linn.* Ensatæ. *Juss.* *Irides*. 47 Species.

1. *I. Bulbocodium*. *Crocus-leaved Ixia*. "Stem one-flowered, short; leaves linear, closely folded; stigmas six;" corolla pale violet, yellow at the base. April. Italy, also in Guernsey. 1739. P.

2. *I. Chinen'sis*. *Chinese Ixia, or Panther-flower*. "Leaves sword-shaped; panicle two-forked; flowers several, peduncled," short-lived, of a pale orange, speckled with a reddish colour. This flower is often represented in Chinese drawings. July. China. 1759. P.

This genus, as well as the last two, contains a great number of species, which are natives of the Cape, and require the protection of the green-house. Modern botanists have divided them into several new genera, which have not as yet been universally received: the roots of all



the species of *Ixia* are frequently eaten by the inhabitants of the Cape.

VI. *COMMELI'NA*, so named from John and Gaspar Commelin, uncle and nephew, two Dutch botanists; the elder published a *Belgic Flora*, 1683. Nat. ord. *Linn.* *Ensatae.* *Juss.* *Junci.* 13 Species.

1. *C. Commu'nis.* *Common American Commelina.* "Corolla unequal; leaves egg lance-shaped, acute; stems creeping, smooth," jointed, branched, leafy, leaves alternate; flowers axillary, two or three together, on short footstalks; corolla of two large blue petals, and four small green ones. June and July. North America. 1732. A.

2. *C. Erec'ta.* *Upright Blue Commelina.* "Corolla unequal; leaves egg lance-shaped; stem erect, somewhat shaggy, most simple;" flowers pale blue; smaller petals whitish and pellucid. August. Virginia. 1732. P.

3. *C. Virg'nica.* *Virginian Commelina.* "Corollas nearly equal; leaves lance-shaped, somewhat stalked, bearded on the edge; stems upright," glossy, two feet high; flowers blue, petals heart-shaped, lower flower on a pedicle; plant nearly allied to the preceding, and perhaps only a variety. June. Virginia. 1779. P.

VII. *LOEFLIN'GIA*, named by Linnæus in honour of his pupil, Peter Loefling, who botanized in South



America; died 1758. Nat. ord. *Linn.* Caryophyllei. *Juss.* Caryophyllæ. 2 Species.

1. *L. Hispanica.* *Spanish Loeflingia.* "Leaves awl-shaped, sharp pointed; flowers axillary, sessile;" stems round, jointed, two inches long; flowers nearly white. June. Spain. 1770. A.

VIII. CNEO'RUM, the *Κνισαρον* of Theophrastus, derivation unknown. Nat. ord. *Linn.* Tricoceæ. *Juss.* Terebintaceæ. 1 Species.

1. *C. Tricoëcum.* *Widow-wail, or Spurge Olive,* a small evergreen shrub, two feet and a half high; branches compact, well garnished with leaves, cylindrical, smooth, alternate, sessile, oblong; flowers pale yellow, small, axillary, on short peduncles. May. South of Europe. 1596. E. S.

IX. ORTE'GIA, named by Loeßling in honour of Joseph Ortega, the companion of his travels. Nat. ord. *Linn.* Caryophyllei. *Juss.* Caryophyllæ. 2 Species.

1. *O. Hispanica.* *Spanish Ortega.* "Stem branched, square; peduncles many-flowered;" leaves opposite, sessile, linear; flowers greenish, on short stalks, so close together as to form a little head, June. Spain. 1768. P.

2. *O. Dicho'toma.* *Forked Ortega.* "Stem forked, peduncles one-flowered;" leaves opposite, sessile, between each pair two stipulas, minute, bristle-



shaped; flowers in forked panicles, greenish. August. Italy. 1781. P.

X. POLYCNE'MUM, from πολυς many, and κνημη a leg; a name adopted by Linnæus from the number of slender stalks. Nat. ord. Linn. Holoraceæ. Juss. Atriplices. 5 Species.

1. P. Arven'se. *Trailing Polycnemum*. "Stem diffuse; leaves awl-shaped, triangular," numerous, scattered, rigid, with axillary tufts of smaller leaves; flowers very small, axillary, sessile, whitish; bractes two to each flower, pale green. July. South of Europe. 1758. A.

XI. CYPERUS, from κυπαρος a vase, which form the roots of some species resemble. Nat. ord. Linn. Calamariæ. Juss. Cyperoideæ. 76 Species.

1. C. Lon'gus. *Sweet Cyperus, or English Galin-gale*. "Culm leafy; umbel leafy, more than doubly compound; spikes alternate;" root long, odoriferous; peduncles about twelve in number; spikelets slender, chesnut coloured. The root is aromatic to the smell, warm and bitter to the taste, and was formerly used for nephritic disorders. July. England. P.

2. C. Esculen'tus. *Eatable Cyperus, or Rush nut*. "Culm three-cornered, naked; umbel leafy; roots fibrous, with oval bulbs or tubers," tasting like filberts; stems about eighteen inches, seldom flowering in England. The roots are commonly sold in the



markets of Italy and the Levant. July. South of Europe. 1597. P.

3. *C. Papyrus. Egyptian Papyrus.* "Culm naked; umbel longer than the involucre; involucre three-leaved, bristly, longer also; spikelets in threes;" stem twelve feet high, terminated by a compound umbel, or rather cyme of innumerable flowers; leaves sword-shaped; the plant has but lately been introduced to our hot houses. The paper of the ancients was made of the inner rind of the stem, cut into strips, laid across each other, and pressed together. August. Egypt. 1803. P. Hot Ho.

XII. *SCIR'PUS*, from *sirpo*, to bind with twigs. Nat. ord. *Calamariæ. Juss. Cyperoidæ.* 70 Species.

1. *S. Lacustris. Tall Club Rush, or Bull Rush.* "Culm round, naked; spikes several, egg-shaped, on foot-stalks, terminating," dark brown with a tinge of red; stems four or five feet, dark green, tough and pliant; much used for platting into the bottoms of chairs. July. Britain. P.

#### *Order Digynia.*

XIII. *PAN'ICUM*, from *panicula*, diminutive of *panus*, bread. Nat. ord. *Gramina.* 80 Species.

1. *P. Italicum. Italian Panick Grass.* "Spike compound, drooping, interrupted at the base; spikelets clustered; involucre of many long tough bris-



tles; common stalk woolly;" stems four or five feet high; leaves broad, harsh, condensed panicle very heavy, bent downwards. August. Both Indies. 1739. A.

2. *P. Miliaceum*. *Millet, Panick Grass, or true Millet*. "Panicle loose and flaccid; sheaths of the leaves hairy; glumes pointed, ribbed." Stem four or five feet high; leaves pale, broadish; panicle large, loose, hanging on one side. August. East Indies. 1597. A.

The plants of this unwieldy genus are commonly of no other known use than to afford food for birds. *P. Italicum* is supposed to be the true Panick of the ancients; and its drooping panicle is described by Pliny, who speaks of it as not so much used as the millet *P. Miliaceum*, for making bread, but weighing more than any other grain; both sorts have been long cultivated in Italy; the latter affording a very delicate, though not a very nutritious grain, much used for puddings. Small birds are so fond of the seeds, that the crop requires the utmost vigilance while ripening.

XIV. PHA'LARIS, from φαλος, shining; on account of its smooth seeds. Nat. ord. Gramina. 12 Species.

1. *P. Canarien'sis*. *Common Canary Grass*. "Panicle ovate, spike shaped, awnless; valves of the calyx, boat shaped; outer corolla of two valves, smooth; inner corolla woolly;" leaves spreading, awned; stipula blunt; torn; valves of the calyx striped with green and white. The plant is cultivated for bird-seed. July. The Canary Isles, but now naturalized in Britain. A.



2. *P. Arundina'cea*. *Reed Canary Grass*. "Panicle upright, with spreading branches; flowers crowded, leaning one way;" leaves reed-like, pointed; panicle often purplish; outer corolla bearing on each valve a tuft of hairs, which has caused this plant to be classed as an *Arundo*, with the specific name of *Colorata*. A variety with striped leaves, green, white, and purplish, is common in gardens, and called striped ribbon, or painted Grass. July. England. P.

XV. *STI'PA*, an ancient generic name, from *στυπή*, tow; the long awns having a fibrous appearance. Nat. ord. Gramina. 11 Species.

1. *S. Peuna'ta*. *Soft Feather Grass*. "Awns feathery; flowers in a simple panicle, bursting from the sheath." This plant is cultivated for the sake of its plummy awns, which are sometimes worn by ladies as feathers, or used to decorate the chimney piece in winter. July. Formerly found in England. P.

2. *S. Jun'cea*. *Rush leaved feather Grass*. "Awn naked, straight, very long; calyx smooth, longer than the seed; leaves naked;" stem three feet high; leaves linear, flowers erect; forming a branching panicle all on one side, with roughish stalks. July. Germany. 1772. P.

XVI. *LAGU'RUS*, from *λαγός*, a hare, and *οὐρά*, the tail. Nat. ord. Gramina. 1 Species.

1. *L. Ova'tus*. *Hare's Tail Grass*. Stem solitary,



downy and soft ; spike ovate, soon drooping ; beset with soft hairs of a pale straw colour. It serves to decorate flower pots in winter, mixed with any everlasting flowers. July. South of Europe. 1640. A.

XVII. SACCHARUM. σακχαρ, Greek, which is from the Hebrew, signifying a sweet juice. Nat. ord. Gramina. 11 Species.

1. S. Officinarum. *Sugar Cane*. "Leaves flat, flowers in pairs, panicled," on long loose zigzag spikes ; panicle spreading every way in feathered branches ; a foot long ; stem about ten feet high, with frequent joints. Both Indies. 1597. P. Hot Ho.

Saccharum has about twelve species, and the common sort has several varieties ; a perfectly formed panicle of the sugar cane is a most elegant object. In the West Indies, the canes are squeezed between iron-cased rollers to express the juice, which, properly manufactured, becomes sugar ; and from its last drainings is extracted the spirituous liquor called rum.—Before the discovery of America, the sugar cane had been cultivated in Sicily and the Levant, but its use was chiefly medicinal.

XVIII. BRIZA, βριζα, to nod or sleep. The seeds of some species being supposed to be slightly narcotic. Nat. ord. Gramina. 7 Species.

1. B. Media. *Quake Grass, Cow Quakes, Shakers, Ladies Hair, Birds eyes*. "Spikelets ovate, seven flowered ; calyx shorter than the valves of the corolla." Leaves acute, flat, a little rough ; panicle wide spread-



ing; branches by twos; spikelets pendulous, trembling, variegated with white and brown. June. England. P.

2. B. Virens. *Green Quake Grass*. "Spikelets ovate; seven flowered; calyx equal to the valves of the corolla." Very like the preceding, but the leaves twice as broad; panicle green; flowers smaller, falling off when shaken. July. Spain. 1787. A.

3. B. Maxima. *Great Quake Grass*. "Spikelets heart-shaped; florets seventeen." Leaves broad; spikelets few; large, shining, skinny, variegated with green and white. July. South of Europe. 1633. A.

4. B. Eragrostis. *Branched Quake Grass, or Love Grass*. "Spikelets lance shaped; florets from fifteen to twenty." Panicle oblong; spikelets two-rowed, hoary or silvery. July. S. of Europe. 1776. A.

These grasses are extremely pretty; but their chief use is for ornamenting the chimney piece in winter.

XIX. AVE'NA, from *aveo*, to desire or covet. Cattle being fond of it. Nat. ord. Gramina. 34 Species.

1. A. Sibirica. *Siberian Oat*. "Panicle, calyx one flowered, seeds hairy; awns thrice the length of the calyx." Culm slender; leaves rolled up at the edges; panicle resembling a spike, often directed to one side; corolla woolly. July. Siberia. 1777. P.

2. A. Sativa. *Cultivated Oat*. "Calyxes two seeded; seeds very smooth, one of them awned;"



panicle various, but always loose and pendulous. July. A.

The Oat is a very profitable grain; but no botanist has been able to ascertain, with certainty, the native place of growth of this, nor indeed of any other grain now commonly cultivated. The varieties of the common Oat are four: the white, black, red, and the blue, or Scotch greys; these have been long known, and others have been introduced under the names of Poland, Friesland, Dutch and Tartarian Oat. Oatmeal is esteemed for making gruel, and other messes; it is also made into cakes. One native species, the *A. Fatua*, or Wild Oat, is a most destructive weed amongst corn.

XX. ARUN'DO, from *arendo*, drying up; because it soon becomes dry. Nat. ord. Gramina. 11 Species.

1. *A. Do'nax*. *Cultivated Reed*. "Calyxes five flowered, panicle diffuse; culm shrubby;" from six to twenty feet high; hard, almost woody, jointed; above each joint a leaf embracing the stem; panicle a foot long and upwards, many flowered; a variety with striped leaves, more tender. July. South of Europe. 1648. P.

XXI. SECA'LE, either from the Latin *seco*, to cut or mow, or from the Celtic *segal*, a sickle. Nat. ord. Gramina. 4 Species.

1. *S. Cerea'le*. *Cultivated Rye*. "Glumes of the calyx bordered with minute parallel teeth;" stem jointed; leaves linear, rough towards the point; awns



erect; four times the length of the corolla; spike very close, of a grey colour. There are two varieties, the winter and spring rye; the winter is larger, and more generally in use. July. Native place of growth unknown. A.

Rye is taller and more slender than wheat; it is less nourishing than the other common sorts of grain. It is principally in use in the northern countries, on account of its early ripening, for making bread, either alone or mixed with wheat, and for extracting an ardent spirit. The name is apt to be confounded with *Rye Grass*, the *Hordeum Pratense*, or Meadow Barley, to which it bears some likeness; and again with *Ray Grass*, the *Lolium Perenne*, so called from the French name of the plant *Ivraie*; but which it does not at all resemble.

XXII. TRITICUM, from *tritius*, rubbed; because the grains are easily rubbed from the spike. Nat. Ord. Gramina. 18 Species.

1. T. *Æstivum*. *Summer, or Spring Wheat*. "Calyx four flowered; tumid, smooth, tiled, awned;" glumes of the calyx hard, somewhat hairy; exterior glume of the corolla with an awn, three inches in length; the ears are narrower, and the grains smaller, than in the next species, of which, by some writers, it is considered only as a variety. July. Perhaps Siberia. A.

2. T. *Hybernum*. *Winter, or Lammas Wheat*. "Calyx four flowered; tumid, polished, tiled; abrupt, with a short compressed point;" stems, one or



more ; spikes long, dense, with the grains ranged in four rows ; glumes of the corolla awnless, or having short awns ; never growing to the length of the last species. July. Native place of growth unknown. A.

Var. 1 red, 2 white, both without awns ; 3 red, 4 white, both with awns.

3. T. Compos'itum. *Many-spiked Wheat*. " Spike compound ; spikelets, from nine to twelve, in two rows ; alternate, crowded ; corolla with long awns." Probably a variety only of the last species. It is cultivated in Naples, but is too tender for this climate. July. Egypt. 1799. A.

4. T. Tur'gidum. *Grey Pollard, Duck Bill, or Cone Wheat*. " Calyx four flowered, swelling, woolly, tiled, obtuse, with a short point ;" corolla, with or without awns ; when ripe the awns drop off ; stem very tall ; spikes large, drooping ; the woolly calyx distinguishes this species from T. Hybernum ; the grain is both red and white ; the variety called Cone Wheat, has the spike thick at bottom, with a slender point at top. July. Native place of growth unknown. A.

5. T. Polo'nium. *Polish Wheat*. " Calyx two-flowered, attended by one or two imperfect florets ; naked ; lance-shaped ; glume of the corolla, with a very long awn ;" spike large, ash coloured ; heavy ; it is not much cultivated, being easily laid by rain. July. Native place of growth unknown. 1692. A.

6. T. Spel'ta. *Spelt Wheat*. " Calyx lopped, four



flowered; two outer florets, awned and fertile; two middle florets, barren and awnless;" glume of the corolla strongly adherent to the grain; which is woolly, and smaller than common wheat; stems stout. It is much cultivated in the southern parts of Europe, but scarcely in Britain. July. Native country unknown. A.

7. *T. Monococcum*. *Single grained Wheat, or St. Peter's Corn*. "Calyx angular, strongly toothed; about three flowered; first floret awned, fertile; the others barren and awnless;" spike smaller than the common wheat; two-rowed, closely tiled; grain of a pale red; much cultivated in the mountainous parts of Switzerland. July. Native country unknown. 1658. A.

The remaining species of this genus are called Wheat Grasses, of no use in agriculture; one of them, the *T. Repens*, or Couch Grass, is a very troublesome weed. *T. Hybernum* may more properly be considered as an annual than a biennial plant, as it will ripen in a single year from the time of sowing; though in cultivation it is commonly made to take up a part of two. Besides the varieties mentioned, innumerable others are daily introduced, which give way to new ones, arising from different modes of cultivation; varieties, that are excellent in themselves, may lose their merit by being cultivated in a soil not adapted to them. The uses of wheat are so obvious, that it is needless to detail them.

XXIII. HOR'DEUM, from *horreo*, to set up the



bristles, or hair, through fear or anger; from its long stiff awns. Nat. ord. Gramina. 10 Species.

1. *H. Vulga're.* *Spring or Common Barley.* "All the florets perfect, and awned, in two very upright rows;" seed with a thin rind, or skin; lower florets often imperfect; glumes of the calyx shorter than the corolla; awl shaped, with a short awn; outer glume of the corolla fringed at the back; awn three inches long; inner glume awnless. July. Native country unknown. A.

Var. 1. *H. Cœleste, or Siberian Barley;* leaves broader; spike smaller; ripening a fortnight earlier.

2. *H. Hexa'stichon.* *Winter or Square Barley, Bear, or Big.* "All the florets perfect, and awned; seeds in six equal rows;" spike thicker and shorter than in the last species; outer glume of the corolla with an awn, from four to six inches in length; harder; but the rind of the seed thicker, which makes it not so fit for malting; much cultivated in the northern counties and in Scotland. July. Native country unknown. A.

3. *H. Di'stichon.* *Long eared Barley.* "Lateral florets, with stamens only, awnless;" seeds angular, tiled; in a double row; spike long, heavy, flattened on one side; calyx glumes of the fertile florets but half the length of the glume of the corolla; which ends in an awn, sixteen times its own length; this glume invests the grain very closely when ripe; when removed, the grain is of an ovate form, grooved



and angular. These last two species are thought, by some, to be varieties only of the first. July. Native country unknown. A.

4. H. Zeo'criton. *Sprat, or Battledore Barley.* "Lateral florets, with stamens only, awnless; grains angular, expanding, barked;" ears shorter and broader than the common sort; grains more crowded; awns of the corolla longer; straw shorter, and coarser. July. Native country unknown. A.

The rest of the species are weeds. In Barley, the filaments being shorter than the corolla, do not hang out, and therefore it is not so liable to be damaged by rain as Wheat and Rye. Barley is made into bread in the northern counties; the meal is much used for fattening black cattle, hogs, and poultry. French Barley, is Barley freed from the husk. Pearl Barley is also freed from the husk, and rounded by a mill. The great importance of Barley, when made into malt, for the purposes of brewing and distillation, needs not to be insisted on. As mentioned under the genus *Avena*, one cannot but wonder at the singularity of the circumstance, that the native places of growth of all the grain most serviceable to the wants of mankind, should have been, from the earliest period of history, unknown.

*Order Trigynia.*

XXIV. MOLLU'GO. *Mollis*, soft; from its smooth and tender habit. Nat. ord. *Linn. Juss.* Caryophyllei. 5 Species.

1. M. Verticilla'ta. *Whorled Mollugo.* "Leaves in whorls, wedge form; acute, stem much branch-



ed, declining, smooth, peduncles one flowered;" leaves obovate entire; flower stalks lateral, not axillary, shorter than the leaves; corolla whitish, resembling chick weed; seeds very prominent. July. Virginia. 1750. A.

**XXV. MINUAR'TIA.** In honour of a Spanish botanist, Minuart, the friend of Loeffing. Nat. ord. *Linn. Juss.* Caryophyllei. 5 Species.

1. *M. Dicho'toma.* *Forked Minuartia.* "Flowers clustered, in a forked manner;" stem simple, erect; leaves opposite, awl-shaped; so close as to cover the stem; flowers sessile; plant very small; the whole assuming a brownish green colour. July. Spain. 1771. A.

**XXVI. KOENI'GIA,** named by Linnæus, in honour of Koenig, a physician, of Courland, who first found the plant in 1765. Nat. ord. *Linn.* Holoraceæ. *Juss.* Polygoni. 1 Species.

1. *K. Isla'ndica.* *Iceland Koenigia.* An humble plant, scarcely two inches high, with a few alternate, obovate leaves, and small green terminal flowers; whole herb smooth, turning red in decay. April. Iceland. 1773. A.



## CLASS IV.

## TETRANDRIA.

*Order Monogynia.*1. *Flowers one petaled, one seeded, inferior.*

I. GLOBULARIA. Common calyx tiled; proper calyx tubular beneath; partial corollas with the upper lip two cleft; under lip three cleft; receptacle chaffy.

2. *Flowers one petaled, one seeded, superior, aggregate.*

II. DIPSACUS. Common calyx many leaved; proper calyx superior, one leaved; receptacle chaffy; seeds columnar.

III. SCABIOSA. Common calyx many leaved; proper calyx superior, double, crowning the seed; receptacle chaffy or naked.

IV. KNAUTIA. Common calyx oblong, simple, from five to ten flowered; proper calyx simple, superior; florets irregular; receptacle naked; seeds woolly at the top.

III. *Valeriana sibirica.*3. *Flowers one petaled, one fruited, inferior.*

V. CEPHALANTHUS. Flowers aggregate, fixed to a globular receptacle; proper calyx superior, funnel form; corolla tubular; seed one, woolly.

VI. PLANTAGO. Calyx four cleft; corolla four



cleft, inferior, membranous; border bent back; stamens very long; capsule two celled, bursting all round.

VII. BUDDLEA. Calyx four cleft; corolla four cleft; stamens from the divisions; capsules two; furrowed; two celled; many seeded.

4. *Flowers one petaled, one fruited, superior.*

VIII. MITCHELLA. Corolla one petaled, superior; two flowers on each germ; stigmas four; berry in two parts; four seeded.

IX. SANGUISORBA. Corolla superior; calyx two leaved, inferior; capsule four cornered, between the corolla and calyx.

5. *Flowers one petaled, two berried, inferior.*

X. HOUSTONIA. Corolla one petaled, funnel shaped; capsule superior, two celled, two seeded.

6. *Flowers one petaled, two berried, superior.*

XI. RUBIA. Corolla bell shaped; berries two, each with a single seed.

XII. GALIUM. Corolla flat; seeds two, roundish.

XIII. ASPERULA. Corolla funnel shaped; seeds two, globular.

XIV. CRUCIANELLA. Involucre to each flower; two or three leaved; corolla funnel shaped; tube thread shaped; border with a claw; seeds two, linear.

XV. SPERMACOCE. Corolla funnel formed; seeds two, two toothed.



7. *Flowers four petaled, inferior.*

XVI. EPIMEDIUM. Nectaries four, incumbent on the petals; calyx one leaf deciduous; fruit a silique one celled.

XVII. PTELEA. Calyx deeply four cleft; stigmas two; drupe compressed, membranous; seed solitary.

XVIII. AMMANNIA. Corolla often wanting; calyx one leaf plaited, eight toothed; capsule four celled.

V. *Euonymus Europæus.*8. *Flowers four petaled, superior.*

XIX. TRAPA. Calyx four leaves; nut armed, with two or four opposite horns originating in the leaves of the calyx.

XX. CORNUS. Calyx four toothed, superior, deciduous; drupe with a two celled nut.

XXI. LUDWIGIA. Calyx four cleft, superior; capsule square, four celled, many seeded.

9. *Flowers incomplete, inferior.*

XXII. POTHOS. Sheath of one leaf; receptacle an oblong spadix covered with flowers; petals four; calyx none; berry with two seeds.

XXIII. ALCHEMILLA. Calyx eight cleft; corolla none; seed one, inclosed in the calyx.

VI. *Convallaria bifolia.* XXIII. *Parietaria.*10. *Flowers incomplete, superior.*

XXIV. ELÆAGNUS. Corolla none; calyx four cleft, bell shaped, coloured; drupe beneath the calyx.



*Order Digynia.*

XXV. HYPECOUM. Calyx two leaved; corolla of four petals, the two outer broader; three cleft; seed in a silique.

XXVI. HAMAMELIS. Involucre three leaved; calyx double, the outer of two, the inner of four leaves; corolla of four petals; nut two horned; two celled.

*Order Tetragynia.*

XXVII. ILEX. Calyx four toothed; corolla wheel shaped; style none; berry four seeded.

## CLASS IV.

## TETRANDRIA.

*Order Monogynia.*

I. GLOBULARIA, so called because its flowers grow in the shape of a globe or little ball. Nat. ord. *Linn. Aggregatæ. Juss. Lysimachiæ.* 9 Species.

1. *G. Vulga'ris.* *Common Globularia or Blue Daisy.* "Stem herbaceous; radical leaves with three teeth; stem leaves lanceolate;" stem a span high, terminated by a head of deep blue flowers. June. South of Europe. 1739. P.

2. *G. Cordifo'lia.* *Heart-leaved Globularia.* "Stem almost naked; leaves heart wedge form, with three points, the middle point very small;" root



creeping from each joint, a cluster of leaves, and a purplish stem, terminated by a head of blue flowers. July. Switzerland. 1759. P.

3. *G. Nudicaulis*. *Naked-stalked Globularia*. "Stem naked; leaves entire; lanceolate;" somewhat larger than the last, firm, thickish; flowers blue. July. Austria. 1739. P.

4. *G. Longifolia*. *Long-leaved Globularia*. "Stem shrubby; leaves linear, lanceolate, entire; flowers in heads, axillary," small, blue; leaves growing very thick towards the end of the branches; seeds downy. August. Madeira. 1775. S. Gr. Ho.

5. *G. A'lypum*. *Herb Terrible*. "Stem shrubby; leaves egg lance-shaped, three toothed, or undivided; heads of flowers terminal," blue or purplish; branches beset with leaves like the myrtle; the whole plant is bitter and purgative in a violent degree, it rises about two feet in height, the former species is much higher. August. South of Europe. 1640. S. Gr. Ho.

II. DIP'SACUS, from διψω, to be thirsty, the leaves being so formed as to hold water. Nat. ord. *Linn.* *Aggregatæ*. *Juss.* *Dipsacæ*. 4 Species.

1. *D. Fullonum*. *Cultivated or Fullers Teasel*. "Leaves united at the base, serrate; involucre short, chaffy, bent back;" stem five feet high, straight, prickly; flowers light purple. July. England. B.

2. *D. Sylvestris*. *Wild Teasel*. Scarcely different



from the last, except being smaller, and the chaffs on the receptacle straight. July. England. B.

3. *D. Lacinia'tus*. *Jag-leaved Teasel*. "Leaves connate, wing cleft, irregularly jagged;" pubescent beneath, having short prickles along the nerve; chaffs straight; flowers whitish; anthers reddish; prickle, weaker than in the last. July. Germany. 1693. B.

4. *D. Pilo'sus*. *Small Teasel or Shepherd's Rod*. "Leaves ovate, on leaf stalks, with appendages at the base;" flowers white, sometimes with a purplish tinge; stem fragile. July. England. B.

The first species is cultivated for the use of the clothiers, who employ the heads with crooked awns to raise the knap upon woollen cloths; for this purpose they are fixed round the circumference of a wheel, which is made to turn round, and the cloth is held against them. The water contained in the basin of the leaves was once believed to cure warts.

III. *SCABIO'SA*, perhaps from *scaber*, rough; by others it is derived from *scabies*, the itch, because it is said to cure that disorder. Nat. ord. *Linn. Aggregatæ*. *Juss. Dipsacææ*. 41 Species.

\* *Corollas four cleft.*

1. *S. Alpi'na*. *Alpine Scabious*. "Corollas equal, or all of the same size; calyx tiled; flowers drooping; leaves pinnate; leaflets lanceolate, serrate;" stem five or six feet high; flowers yellowish, in round scaly heads. June, July. Switzerland. 1570. P.



2. *S. Transylvanica*. *Transylvanian Scabious*. "Corollas equal; calyx and chaff awned; root leaves lyre shaped; stem leaves wing cleft;" stems four or five feet high, dividing into several branches; flowers small, pale purplish. July. Transylvania. 1699. A.

3. *S. Syria'ca*. *Syrian Scabious*. "Corollas equal; calyx tiled, awned; chaffs of the receptacle awned; leaves lanceolate, serrate;" stem forked, tall; flowers purple; nearly sessile in the forks of the stem; chaffs collected into a cone. July. Syria. 1699. A.

4. *S. Leucan'tha*. *Snowy Scabious*. "Corollas nearly equal; scales of the calyx egg-shaped, tiled; leaves wing-cleft;" stem two feet high, two cleft at top, in the division rises a naked flower stalk, which with each division is terminated by a flower, composed of many white florets. September. South of France. 1739. P.

5. *S. Succisa*. *Devil's bit Scabious*. "Corollas equal; stem leaves toothed; heads of flowers nearly globular; branches few, erect;" root abrupt, said to have been bitten off by the devil in spite to its many virtues; stem leafy, purplish, with three or more flowers, purplish, blueish, or white; upper leaves entire. August to October. England. P.

6. *S. Integrifolia*. *Red-flowered Annual Scabious*. "Corollas radiate, that is, the outside flowers being larger; leaves undivided; root-leaves egg-shaped, serrated; branch-leaves lance-shaped; stem herbace-



ous;" calyx ten leaved; corolla purple, two lipped, the inner undivided, outer three parted. June to August. South of France. 1748. A.

7. *S. Tata'rica*. *Giant Scabious*. "Corolla radiate; leaves lance-shaped, wing-cleft; lobes somewhat tiled;" stem having very tall flowers, lateral and terminal, white; each sitting in a bristly calyx. June. Tartary. 1779. B.

8. *S. Aryen'sis*. *Field Scabious*. "Corolla radiate; leaves gashed, wing-cleft; stem hairy;" radical leaves, undivided; flowers large; marginal flowers purplish blue, the rest pale reddish. July to October. Britain. P.

9. *S. Sylva'tica*. *Broad-leaved Scabious*. "Corolla radiate, leaves undivided; egg-oblong; serrated; stem hairy," somewhat resembling the last species; flowers smaller, purplish; leaves never gashed. July. Switzerland. 1748. P.

\*\* *Corollas five cleft.*

10. *S. Gramun'tia*. *Cut leaved Scabious*. "Calyx short, stem leaves doubly winged; leaflets linear;" lower leaves wing-cleft, downy; flowers deep blue. July. South of France. 1739. P.

11. *S. Columba'ria*. *Small Scabious*. "Corolla radiate; root leaves lyrate, or egg-shaped; crenate; stem leaves wing-cleft; segments linear;" flowers bluish lilac; plant smallish. June. Britain. P.

12. *S. Si'cula*. *Sicilian Scabious*. "Corolla equal; shorter than the calyx; leaves lyre-shaped,



wing-cleft;" stem forked; red; calyx eight leaved; flowers small, red. August. Sicily. 1783. A.

13. *S. Mari'tima*. *Sea Scabious*. "Corollas radiate; shorter than the calyx; leaves winged; upper leaves linear, entire;" branches in threes, long; corolla reddish. July. Italy. 1683. A.

14. *S. Stella'ta*. *Starry Scabious*. "Corollas radiate; leaves gashed; receptacle of the flower roundish;" flowers on long peduncles, large, spreading, of a pale purple; outer crown of the seed membranous, with many ribs. July. Spain. 1596. A.

15. *S. Prolifera*. *Proliferous Scabious*. "Corollas radiate; flowers nearly sitting; stem proliferous, or sending out branches from its top; leaves undivided," lanceolate; stem sometimes forked, with a flower between each of the divisions; corolla yellowish. August. Egypt. 1768. A.

16. *S. Atro-purpurea*. *Sweet or Musky Scabious*. "Corollas radiate; leaves gashed; receptacle cylindrical;" calyx twelve leaved, linear, recurved; flower very dark purple with white anthers, sweet scented. July to September. Native country not known. 1692. B.

17. *S. Argen'tea*. *Silvery Scabious*. "Corollas radiate; leaves wing-cleft; segments linear; peduncles most long; stem columnar;" leaves silvery; stem branching, spreading; flowers pale, with a blueish border. June to October. The Levant. 1713. P.



18. S. Africa'na. *African Scabious*. "Corollas equal; leaves simple, gashed; stem shrubby;" branched; leaves varying into pinnate; peduncle terminating, sustaining one pale flesh-coloured flower. July to October. Africa. 1690. Gr. Ho. S.

19. S. Cre'tica. *Cretan Scabious*. "Corollas radiate; leaves lanceolate, quite entire; stem shrubby," divided into knotted branches; leaves silvery, clustered on the stem; flowers on long peduncles of a fine blue. July to September. Crete, 1596. Gr. Ho. S.

20. S. Graminifo'lia. *Grass-leaved Scabious*. "Corollas radiate; leaves linear, lanceolate, quite entire; stem herbaceous," branching at the base; leaves grass-like, clustered opposite, shining;" corolla blue; outer flowers longer, irregular. July. Switzerland. 1683. P.

21. S. Palæsti'na. *Palestine Scabious*. "Corollas radiate; segments three cleft; leaves undivided, somewhat serrate, upper ones wing-cleft at the base;" stem a foot high; peduncles long; flowers white or lemon coloured, beautiful. June to August. Palestine. 1771. A.

22. S. Ochroleu'ca. *Pale white Scabious*. "Corollas radiate; leaves doubly winged, linear;" first division of the stem forked; corolla pale sulphur colour; leaves varying, into entire and wing cleft. July. Germany. 1739. B.

23. S. Pappo'sa. *Downy-headed Scabious*. "Co-



rollas unequal; stem herbaceous, erect; leaves wing-cleft; seeds awned; plume feathery;" peduncle and calyx woolly; corolla reddish. July. South of Europe. 1739. A.

Scabiosa is an extensive and very natural genus, none of the species has been found in America. *S. Stellata* is cultivated for its heads of seeds, which serve to decorate flower-pots in winter. The flowers of *S. Arvensis*, if held over a lighted pipe of tobacco, acquire a bright green colour: the rich musky scent of *S. Atropurpurea* seems to convey an aromatic warmth as we inhale it.

IV. KNAUTIA, named by Linnæus from Christopher Knaut, Physician at Halle in Saxony, author of *Flora Halensis*. Nat. ord. *Linn. Aggregatæ. Juss. Dipsacæ.* 2 Species.

1. *K. Orientalis. Oriental Knautia.* "Leaves gashed; florets five, longer than the calyx;" stem branched; flowers of a bright red; the genus is distinguished from *Scabiosa* in the calyx being tubular, and the orbit of flowers simple. June to September. The Levant. 1713. A.

2. *K. Propon'tica. Purple-flowered Knautia.* "Upper leaves lance-shaped, entire; florets ten, equal to the calyx;" corolla four-cleft, purplish; pistil white; perhaps only a variety of the former. June to August. The Levant. 1768. B.

V. CEPHALAN'THUS, from κεφαλος, a head, and



*αἶθος*, a flower, because the flowers grow in a head.  
Nat. ord. *Linn.* Aggregatæ. *Juss.* Rubiaceæ. 5  
Species.

1. *C. Occidentalis.* *American Button Wood.*  
“Leaves in pairs, or in threes; heads terminal, forming a kind of raceme;” flowers whitish; leaves egg-shaped, pedicled; stem from five to seven feet high. August. North America. 1735. S.

VI. *PLANTA'GO*, from the broad leaves like the sole of the foot, *planta*. Nat. ord. *Linn.* not arranged. *Juss.* Plantaginæ. 33 Species.

\* *Scape, or flower-stalk, naked.*

1. *P. Ma'jor.* *Greater Plantain, or Way-Bread.*  
“Leaves egg-shaped, smooth, seven-nerved, shorter than the foot-stalk; flower stalks round; spike with tiled florets,” crowded, whitish; seeds very many. May to July. Britain. P.

Var. 1. *Besom Plantain*, panicle scattered.

Var. 2. *Rose Plantain*, spike abortive; floral leaves expanded like a Rose; often cultivated in gardens.

2. *P. Asia'tica.* *Asiatic Plantain.* “Leaves egg-shaped; flower-stalk angular; spike longer, with flowers distinct:” this scarcely differs from the last species. July. Siberia. 1787. A.

3. *P. Max'ima.* *Broad-leaved Plantain.* “Leaves egg-shaped, toothed, downy, nine-nerved; spike cylindrical, tiled; flower-stalk round;” corolla pale;



stamens long; leaves whitish, various in breadth. July. Siberia. 1763. P.

4. *P. Virgínica. Virginian Plantain.* "Leaves lance egg-shaped, toothed, pubescent; flowers on the spikes remote; flower-stalk round," downy; leaves half three-nerved; it scarcely unfolds its corolla. June to September. Virginia. 1775. A.

5. *P. Altis'sima. Tall Plantain.* "Leaves lance-shaped, five-nerved, toothed, smooth; spike oblong, cylindrical; flower-stalk somewhat angled;" leaves from a foot to a foot and a half in length, thick, on very long pedicles; flower-stalks two or three feet high; spikes shortish, compact. July. Italy. 1777. P.

6. *P. La'gopus. Hare's-foot Plantain.* "Leaves lance-shaped, five-ribbed, distantly toothed; spike ovate, silky, with soft hoary hairs; stalk round;" corolla pale. June to July. South of Europe. 1683. P.

7. *P. Al'bicans. Woolly Plantain.* "Leaves lanceolate, oblique, waved, downy; spike cylindrical, rather lax; stalk round, longer than the leaves;" spikes long and slender; corolla brown; stamens red; anthers yellow. June to September. Spain. 1770. P.

8. *P. Alp'na. Alpine Plantain.* "Leaves linear, flat; stalk round, hairy: spike roundish, erect;" anthers yellow, with a blunt beak. June. Switzerland. 1774. P.

9. *P. Subula'ta. Awl-leaved Plantain.* "Leaves awl-shaped, three sided, scored, rugged; stalk co-



lumnar;" leaves crowded; spikes egg-oblong, not woolly. July. South of Europe. 1773. P.

10. *P. Lusita'nica. Portugal Plantain.* "Leaves broad, lance-shaped, three-nerved, somewhat toothed, and somewhat downy; scape angular; spike oblong, hairy;" corolla white with a yellowish streak; stamens white; style white, pubescent. August. Portugal. 1781. P.

\*\* *Stem branchy.*

11. *P. Psyllium. Clammy Plantain, or Flea Wort.* "Stem herbaceous; leaves somewhat toothed, recurved; heads leafless;" stem round, downy, glutinous; leaves opposite, sessile, an inch long or more; flower-stalks axillary; heads of several crowded flowers pale brownish yellow. July. South of Europe. 1562. A.

Two species of Linnæus, *P. Indica* and *P. Afra*, are probably but varieties of this.

12. *P. Squarro'sa. Leafy Spiked Plantain.* "Stem herbaceous, spreading on the ground; leaves linear, entire; heads squarrose or ragged;" floral leaves long, recurved; florets solitary, on a leafy spike; petals pale. September. Egypt. 1787. A.

13. *P. Cy'nops. Shrubby Plantain.* "Stem shrubby, smooth; leaves entire, thread-shaped, straight; heads leafy;" floral leaves rounded, with linear points, much longer than the flowers; branches



and heads purplish. May to August. South of Europe. 1596. S.

The Plantains are seldom to be seen, unless in botanic gardens, being of little beauty. The British species are five, and to be found in pastures, and road sides. The shrubby sorts of Plantain, in the second section, require the protection of the green-house: there are also some Cape species. Several of the species are much subject to variation; 6, 7, and 10, are so nearly allied, that we may conjecture their difference to arise from a change of soil, or from a cross impregnation.

VII. BUDDLE'A, in honour of Adam Buddle, an English Botanist; commended by Ray. Nat. ord. *Linn.* Personatæ. *Juss.* Scrophulariæ. 9 Species.

1. B. Globo'sa. *Round-headed Buddlea*. "Leaves lanceolate; heads solitary and peduncled;" stem eight to ten feet; leaves scolloped at the edges, connate, about five inches long; flowers small, yellow, bell-shaped, of a pleasing smell, on a globular receptacle. July. Chili. 1774. E. S.

VIII. MITCHEL'LA, by Linnæus in honour of Dr. John Mitchell, a physician and botanist of Virginia. Nat. ord. *Linn.* Aggregatæ. *Juss.* Rubiaceæ. 1 Species.

1. M. Re'pens. *Creeping Mitchella*. Stem creeping; leaves in pairs; flowers terminal, two on each germ, white. June. North America. 1761. P.

IX. SANGUISOR'BA, from *sanguis*, blood, and



*sorbeo*, to absorb, because it stops hæmorrhages. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosacææ. 3 Species.

1. *S. Officinalis.* *Great Burnet.* "Spikes egg-shaped;" leaves on long stalks, unequally pinnate; flowers mulberry colour, June to August. Britain. P.

Var. 1. *Italian Burnet*, spike cylindrical; flowers brown.

Var. 2. *Spanish Burnet*, spike globular, reddish.

2. *S. Me'dia.* *Short-spiked Burnet.* "Spikes cylindrical," closely allied to *S. Officinalis*; spikes of reddish flowers, cylindrical not oval; stamens longer; calyx fringed at the edge. July to September. Canada. 1785. P.

3. *S. Canaden'sis.* *Canadian Burnet.* "Spikes very long;" stem divided into numerous branches; leaves unequally pinnate; leaflets four or five, light green, serrated; flowers of an herbaceous white colour varying to red. June to September. North America. 1640. P.

These plants are astringent; the leaves are an ingredient in cool tankards, and sometimes in salads.

X. *HOUSTONIA*, from Dr. Houston, who botanized in the West Indies, and died there 1733. Nat. ord. *Linn.* Stellatæ. *Juss.* Rubiaceæ. 2 Species.

1. *H. Cæru'lea.* *Blue-flowered Houstonia.* "Root-leaves egg-shaped; stem repeatedly branched;" leaves smooth, rather acute, opposite, sessile; flowers brilliant pale blue, or almost white with a yellow eye, jas-



mine-like, and very pretty, scentless. May to August. North America. 1785. P.

2. *H. Purpurea*. *Purple-flowered Houstonia*. "Leaves ovate, roughish, lower ones heart-shaped; flowers in a corymbus," reddish purple. June to September. North America. 1800. P.

XI. *RU'BIA*, from *ruber*, red, on account of the red colour of the root. Nat. ord. *Linn.* Stellatæ. *Juss.* Rubiaceæ. 7 Species.

1. *R. Tinctorum*. *Dyer's Madder*. "leaves egg lance-shaped, annual, about six in a whorl, rough at the keel; stem prickly," with little hooks at the angles; root widely spreading; flowers yellowish green, in panicles; berries dark purple. June. South of Europe. 1659. P.

2. *R. Peregrina*. *Wild Madder*. "Leaves four in a whorl, elliptical, shining, smooth above, evergreen, toothed at the margin;" flowers in forked panicles, dirty yellow; five-cleft, and with five stamens; berries black, one abortive. July. England. P.

3. *R. Lucida*. *Shining-leaved Madder*. "Leaves elliptical, evergreen, six in a whorl, smooth at the keel; stem without prickles;" rather shrubby, downy; leaves sessile, smooth on both sides; flowers in axillary three-forked panicles, yellowish green. July. Majorca. 1762. P.

4. *R. Cordifolia*. *Heart-leaved Madder*. "Leaves perennial, four in a whorl, heart-shaped;" herb dif-



fuse; leaves rugged and dotted; flowers white, on axillary spreading panicles. July. Siberia. 1783. P.

The root of the first species affords a fine scarlet colour in much request with dyers and calico-printers; it has been cultivated in England, but with no great success; it possesses the peculiar property of tinging with a red colour the milk, and even the bones of animals that are fed upon it: the last species is used for the same purpose as the first in China.

XII. GA'LUM, from γαλα, milk, some of the species having the property of curdling that fluid. Nat. ord. Linn. Stellatæ. Juss. Rubiaceæ. 50 Species.

\* *Fruit smooth.*

1. G. Rubioïdes. *Madder-leaved Ladies Bed-straw, or Goose-Grass.* "Leaves in fours, lance egg-shaped, equal, rugged underneath; stem erect;" flowers on a short panicle, white; seeds smooth. July. South of Europe. 1775. P.

2. G. Ve'rum. *Yellow Ladies Bed-straw, or Cheese Rening.* "Leaves eight together, linear, furrowed, rough; flowers panicled, crowded," yellow, as are the stamens and style; stem erectish; flower-stalks short. July. Britain. P.

3. G. Sylva'ticum. *Wood Ladies Bed-straw.* "Leaves in eights, smooth above, rugged underneath; a pair of floral leaves on hair-like foot-stalks; stem smooth and even," somewhat glaucous; flowers before opening nodding, whitish; seed round, black. June. South of Europe. 1713. P.



4. *G. Linifo'lium.* *Flax-leaved Ladies Bed-straw.*  
 "Leaves mostly in sevens, linear, lance-shaped, polished; peduncles capillary; stem erect, four-sided;" flowers whitish. June, July. South of Europe. 1759. P.

5. *G. Glau'cum.* *Glaucous Ladies Bed-straw.*  
 "Leaves in whorls, five or six, linear; peduncles forked; stem polished," weak; leaves glaucous beneath, rough at the edge; flowers white, in three-cleft small umbels. June to September. South of Europe. 1713. P.

6. *G. Ru'brum.* *Red-flowered Ladies Bed-straw.*  
 "Leaves linear; peduncles very short;" stem slender, prostrate, rough; leaves on the stem six or seven in a whorl, on the branches four or five, bent down; flowers small, of a pale purple or whitish; in panicles at the end of the stem and branches. July. South of Europe. 1804. B.

7. *G. Arista'tum.* *Bearded Bed-straw.* "Leaves in eights, polished; panicle capillary, petals of the corolla awned;" stem a foot high; leaves nicely lanceolate, not stiff; flowers whitish. July. Italy. 1778. P.

\*\* *Fruit hispid, or rough.*

8. *G. Borea'le.* *Cross-leaved Ladies Bed-straw.*  
 "Leaves in fours, lance-shaped, three-nerved, smooth; stem erect;" flowers numerous, in a terminating panicle, white. July. Britain. P.

9. *G. Pilo'sum.* *Hairy Ladies Bed-straw.* "Leaves



in fours, nearly oval, hairy, without nerves ;" seeds hairy ; flowers whitish. July. North America. 1778. P.

Most of the Galiums, having little beauty and being subject to spread and to over-run whatever plants grow near them, are seldom cultivated: the roots of several afford a red dye like madder. The British species are fourteen, one of them growing in every hedge; the *G. Aparine*, or Goose-Grass, or Clivers, has been much used in scorbutic disorders.

XIII. *ASPER'ULA*, a diminutive of *asper*, rough, the seeds being roughish. Nat. ord. *Linn. Stellatæ. Juss. Rubiaceæ.* 11 Species.

1. *A. Odora'ta.* *Sweet-scented Woodroof.* "Leaves in eights, lance-shaped; flowers in bundles, on foot-stalks;" fruit hispid; panicles terminal, two or three cleft; flowers white: the plant when recent inodorous; but dried, very fragrant, resembling vernal grass. August. Britain. P.

2. *A. Arven'sis.* *Corn or Blue Woodroof.* "Leaves six in a whorl; flowers sitting, aggregate, terminal;" stem forked; flowers blue. July. South of Europe. 1772. A.

3. *A. Tauri'na.* *Broad-leaved Woodroof.* "Leaves four in a whorl, egg lance-shaped; flowers in terminal bunches;" leaves hairy, nerved; flowers flesh-coloured. June. Italy. 1739. P.

4. *A. Crassifo'lia.* *Thick-leaved Woodroof.* "Leaves in fours, oblong, rolled at the edges, obtuse, hairy;"



the last leaves in pairs ; flowers few, in terminating bunches, whitish, pubescent on the outside. June. The Levant. 1775. P.

5. *A. Tincto'ria*. *Narrow-leaved Woodroof*. "Leaves linear, lower ones in sixes, middle, four in a whorl ; stem weak ; flowers generally three-cleft ;" leaves resembling wild thyme ; flowers red. July. Germany. 1764. P.

6. *A. Cynan'chica*. *Small Woodroof, or Squinancy Wort, that is, good for the Quinsey*. "Leaves four together, linear, upper ones unequal ; flowers four-cleft ; fruit smooth ;" stems numerous ; flowers flesh-coloured with red lines. July. Britain. P.

7. *A. Læviga'ta*. *Shining Woodroof*. "Leaves in fours, elliptic, nerveless, rather smooth ; peduncles straddling, three-forked ; flowers white, usually in threes ; stem simple ; seeds rugged. June. South of Europe. 1775. P.

XIV. CRUCIANEL'LA, diminutive of *crux*, a cross, because the leaves are placed cross-wise, in most of the species. Nat. ord. *Linn.* *Stellatæ*. *Juss.* *Rubiaceæ*. 9 Species.

1. *C. Angustifo'lia*. *Narrow-leaved Crucianella*. "Erect leaves, in sixes, linear, flowers in close spikes," small, white, not longer than the calyx. July. South of France. 1659. A.

2. *C. Latifo'lia*. *Broad-leaved Crucianella*. "Procumbent, leaves in fours, lanceolate ; flowers in long



spikes," white ; perhaps only a variety of the former, but larger. July. South of France. 1633. A.

3. *C. Mari'tima*. *Sea Crucianella*. "Stem somewhat shrubby ; leaves in fours, pointed ; flowers opposite, five-cleft ;" floral-leaves growing crosswise, forming a loose spike ; flowers axillary, sessile, yellowish with a tinge of red, shutting in the day, and opening at night ; sweet scented. July. The Levant. 1640. Gr. Ho. S.

XV. SPERMACO'CE, from σπέρμα, a seed, and κακῆ, a sharp point, these plants having prickly seeds. Nat. ord. *Linn.* Stellatæ. *Juss.* Rubiaceæ. 20 Species.

1. *S. Tenu'ior*. *Slender Button Weed*. "Stem smooth, erect ; leaves lanceolate, rough on the upper side ; flowers whorled ;" stamens shorter than the corolla ; fruit hairy ; flowers very small, white. July. Jamaica. 1732. A.

None of the species of this genus are recommended by beauty or utility ; they are natives of the West Indies or the warmer parts of North America, but are seldom cultivated in the English stoves.

XVI. EPIME'DIUM, perhaps from επιμηνιος, being supposed efficacious in female disorders. Nat. ord. *Linn.* Corydales. *Juss.* Berberides. 1 Species.

1. *E. Alpi'num*. *Alpine Barrenwort*. Stem upright, simple ; leaves doubly ternate ; leaflets heart-



shaped, ending in a point, pale above, glaucous beneath; panicle upright; flowers drooping, singular, and beautiful, dark red, with yellow nectaries. June. Native of the Alps, but has been found in Britain. P.

XVII. PTE'LEA, from the Greek name of the Elm, *πειλα*, the fruit bearing a considerable resemblance. Nat. ord. *Linn.* Trihilatæ. *Juss.* Terebintaceæ. 1 Species.

1. P. Trifolia'ta. *Shrubby Trefoil.* Stem woody, from ten to twelve feet high; leaves ternate on long foot-stalks; leaflets ovate; flowers in large bunches of a greenish white colour. July. Carolina. 1724. S.

XVIII. AMMAN'NIA, named by Dr. Houston in honour of John Ammann, Professor of Botany at Petersburg. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Salicariæ. 7 Species.

1. A. Ramo'sior. *Branching Ammannia.* "Leaves half stem-clasping, linear, lanceolate; stalk square, succulent; branches very spreading;" flowers in the axils at bottom solitary, at the top in clusters, purple, of no great beauty. August. Virginia. 1759. A.

XIX. TRA'PA, from *τρίπω*, to turn; the instrument of war with the ancients, for wounding the feet of horses, called the Caltrop, was composed of four points, so placed that one must constantly turn upwards. The fruit of this plant is somewhat of a



similar figure. Nat. ord. *Linn.* Inundatæ. *Juss.* Hydrocharides. 2 Species.

1. *T. Na'tans.* *Europæan Water Caltrop.* "Nuts four-cornered; spines spreading;" a water plant; the submerged leaves capillary; the floating leaves rhomb-shaped; corolla petals white, pellucid, with purple claws; nectary yellow. June to August. South of Europe. 1781. A.

The nuts of this singular plant are farinaceous, and esteemed nourishing; the spines and skins being removed, there is a white sweet kernel within, somewhat like a chesnut. They are sold in the markets of Venice under the name of Jesuits' Nuts.

XX. COR'NUS, from *cornu*, a horn, on account of the toughness of the wood. Nat. ord. *Linn.* Stellatæ. *Juss.* Caprifolia. 12 Species.

\* *Flowers in umbels, with a four-leaved coloured involucre.*

*The male Cornels of the old Botanists.*

1. *C. Mas'cula.* *Cornelian Cherry, or Dog-wood.* "Arborescent; involucre nearly equal to the umbels;" by cultivation it will attain the height of twenty feet; leaves opposite, ovate; flowers appearing before the leaves, yellowish; peduncles forming an umbel; fruit oblong, size of an olive, scarlet. March. Austria. 1596. T.

2. *C. Sue'cica.* *Herbaceous Dog-wood, or Dwarf Honeysuckle.* "Herbaceous; branches in pairs;



umbel between the branches, peduncled;" nerves of the leaves distinct; stem six inches high; leaves opposite, sessile, ovate; flowers dark purple, small. June. Britain. P.

3. C. Canadensis. *Canadian Dog-wood*. "Herbaceous, without branches;" leaves in a single whorl at the top of the stem; umbel peduncled, rising from the centre of the whorl; flowers small, white, purple at bottom; stem six to eight inches. August. Canada. 1774. P.

4. C. Florida. *Great Flowered Dog-wood*. "Arborescent; involucre very large, leaves inversely heart-shaped;" from six to ten feet in height; leaves opposite; flowers small, yellow. North America. 1739. S.

\*\* *Flowers in a cyme, not involucred.*

*The female Cornels of the old Botanists.*

5. C. Sanguinea. *Common Dog-wood, or Dog-berry*. "Branches straight; leaves egg-shaped; cymes depressed in the middle;" branches numerous, red; leaves opposite, pedicled; flowers white, in terminal cymes; drupe dark purple. June. Britain. S.

6. C. Sericea. *Blue berried Dog-wood*. "Branches spreading; leaves egg-shaped, brown, silky underneath; cymes depressed;" fruit blue; leaves acuminate, entire; flowers white. August. North America. 1759. S.

7. C. Alba. *White berried Dog-wood*. "Branches



recurved, leaves broad, egg-shaped; hoary underneath; cymes depressed;" flowers white; drupe globular, of a transparent white. June to September. North America. 1759. S.

8. *C. Stric'ta*. *Upright Dog-wood*. "Branches stiff and straight; leaves egg-shaped, coloured, almost naked; cymes panicled;" flowers white; anthers pale blue, germ with a nectareous crown; drupe soft, blue. June, July. North America. 1758. S.

9. *C. Panicula'ta*. *Panicled Dog-wood*. "Branches upright; leaves egg-shaped, hoary underneath; cymes panicled;" stems numerous; flowers white, in nearly conical panicles; filaments yellowish white; drupe white, retaining the style. July. North America. 1758. P.

10. *C. Alternifo'lia*. *Alternate leaved Dog-wood*. "Leaves alternate;" stem single; branches spreading; when young, purple; leaves ovate; lanceolate, on foot stalks; flowers white, numerous, in a loose terminal cyme; drupe violet-coloured. September. North America. 1760. S.

11. *C. Circina'ta*. *Pennsylvanian Dog-wood*. "Branches warted; leaves roundish, woolly, and grey underneath; cymes depressed;" stem about six feet high; branches numerous, with brownish warts; flowers pedicled, upright, white; drupe pale blue. This shrub is much cultivated in France. July. North America. 1784. S.

Most of the species of *Cornus* are shrubs, or small



trees. The American sorts are equally hardy with our own, and make a better appearance. The fruit of the *C. Mascula* may be eaten raw, or made into tarts. The wood is remarkably hard; of which the modern Indians make their arrows, as the ancient Greeks did their spears.

XXI. LUDWIGIA, by Linnæus, in honour of Christian Ludwig, professor of medicine at Leipsic. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Onagræ. 5 Species.

I. *L. Alternifolia.* *Alternate leaved Ludwigia.* "Leaves alternate, lance-shaped; flower stalks axillary, single flowered; stem erect, angular;" calyx leaves, large; flowers solitary, small, yellow. July. North America. 1752. A.

XXII. PO'THOS, ποθος, an old Greek name for some plant unknown; the word signifies desire. Nat. ord. *Linn.* Piperitæ. *Juss.* Aroideæ. 12 Species.

P. *Fœtida.* *Stinking Pothos, or Scunkweed.* "Leaves heart-shaped; spadix somewhat globular;" flowers sessile, white, exhaling a very fœtid odour; sheath variegated with dull purple and dirty yellow. North America. 1759. P.

XXIII. ALCHEMILLA, because celebrated by the alchemists for its supposed virtues. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 6 Species.



1. A. Vulgaris. *Common Ladies Mantle*. "Leaves lobed," plaited, roundish, lower ones stalked; stems branched; flowers crowded, green, forming a kind of umbel. May to August. Britain. P.

Var. 1. leaves silky.

2. A. Alpina. *Alpine Ladies Mantle*. "Leaves digitate, serrated," silky beneath; five parted; whitish; flowers green. August. Britain. P.

3. A. Pentaphylla. *Five-leaved Ladies Mantle*. "Leaves in fives; many cleft, smooth;" flowers as in the last. To be found only in botanic gardens. July. Alps of Switzerland. 1748. P.

The first species is not unknown in the meadows in England. It is thought by the Swiss to contribute to the richness of the milk in their best dairies. It is somewhat astringent.

XXIV. ELÆAG'NUS, from ελαια, the olive, and αγιος, chaste. Nat. ord. Linn. Calycifloræ. Juss. Elæagni. 10 Species.

1. E. Angustifolia. *Narrow-leaved Oleaster, or Chaste Olive Tree*. "Branches sometimes with thorns; leaves lance-shaped;" flowers solitary, or two together, small, yellow, with a strong scent, especially at night; an elegant small tree, or shrub, with a silvery pubescence. July. South of Europe. 1633. S.

Order Digynia.

XXV. HYPE'COUM, from υπηχυν, to resound; be-



cause its seed vessels, when touched, burst with a crackling noise. Nat. ord. *Linn.* Corydalis. *Juss.* Papaveraceæ. 4 Species.

1. *H. Procumbens.* *Procumbent Hypecoum, or Wild Cummin.* "Pods curved, compressed, jointed;" leaves chiefly radical, pale, divided; stem terminal; flower stalks supporting a single flower; stem yellow. There is a smaller variety. July. South of Europe. 1597. A.

2. *H. Pendulum.* *Pendulous Hypecoum.* "Pods nodding, smooth, cylindrical;" stems slender; flowers from the divisions of the branches, yellow, smaller than in the former species; leaves longer and narrower. July. South of France. 1640. P.

3. *H. Erectum.* *Erect Hypecoum.* "Pods erect, round, cylindrical;" writhed and twisted; plant of much the same appearance as the last species. June. Siberia. 1759. B.

These plants are but seldom cultivated. Their juice is of a yellow colour, resembling that of Celandine; and it is said to be narcotic.

XXVI. HAMAME'LIS, from *αμα*, accompanying, and *μηλα*, the apple tree; because it blossoms in the same season. This is an old Greek name for some plant not now ascertained, and is now appropriated by Linnæus. Nat. ord. *Linn.* Amentaceæ. *Juss.* Berberides. 1 Species.

1. *H. Virginia'na.* *Witch, or Wych Hazel.* Stem



woody, from two to three feet high; leaves oval, indented; deciduous early in autumn, when the flowers appear in spikes, or clusters, white; stalks and calyx downy; from November to May. Virginia. 1736. S.

*Order Tetragynia.*

XXVII. ILEX, in the Greek *πρινος*, from *πριζω*, to cut with a saw; from its serrate and thorny leaves. The etymology of the Latin word seems not to have been explained. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 19 Species.

1. I. *Aquifo'lium.* *Holly, or Hulver.* "Leaves egg-shaped, sharp, thorny, shining, waved; flowers axillary, in a kind of umbel," of a dirty white. June. Britain. E. T.

Var. 1. *Heterophylla.* *Various leaved Holly.* Leaves toothed; some thorned, and some entire.

Var. 2. *Crassifolia.* *Thick leaved Holly.* Leaves thick, equally serrated.

Var. 3. *Recurva.* *Slender Holly.* Leaves narrow, recurved.

Var. 4. *Ferox.* *Hedge Hog Holly.* Surface of the leaves covered with prickles.

2. I. *Cassine.* *Dahoon Holly.* "Leaves alternate; distant, lance-shaped, serrated; serratures sharp pointed;" leaves about four inches long, and one and a quarter broad, thickish; flowers in thick clusters, white. August. Florida. 1726. E. T. Gr. Ho.

Var. 2, with narrower leaves, scarcely serrated.



3. I. Vomito'ria. *South Sea Tea, or Evergreen Cassine*. "Leaves alternate, distant, oblong, bluntish; crenate, serrate, without prickles;" flowers in close whorls at the joint of the branches, white. August. West Florida. 1700. E. T. Gr. Ho.

4. I. Opa'ca. *Carolina Holly*. "Leaves egg-shaped, prickly, smooth, flat; flowers scattered, at the base of the last year's shoots;" flowers whitish. June. Carolina. 1774. E. T.

5. I. Prinoïdes. *Deciduous Holly*. "Leaves elliptic, lance-shaped; acute, deciduous, serrate; serratures without prickles;" flowers whitish. July. Carolina. 1760. T.

This genus consists entirely of small trees and shrubs. The first species will rise to near thirty feet. The varieties from cultivation are extremely numerous. It makes, when kept shorn, a most impenetrable hedge; its wood is white and hard, much used in articles called Tunbridge ware. The bark, fermented, makes the common bird-lime; the third species is in esteem with the Indians, as an emetic; and is supposed to be the same plant which grows in Paraguay, where the Jesuits made a great revenue from the leaves.



## CLASS V.

## PENTANDRIA.

*Order Monogynia.*1. *Flowers one petaled, inferior, one seeded.*

I. MIRABILIS. Calyx five-cleft; corolla funnel-shaped; stigma globose: nectary inclosing the germ.

II. PLUMBAGO. Corolla funnel-shaped; stamens inserted into the receptacle; stigma five-cleft.

2. *Flowers one petaled, inferior, two-seeded.*

III. CERINTHE. Corolla bell-shaped; border tubular, swollen; throat naked; seeds two celled; bony.

IV. MESSERCHMIDIA. Corolla funnel-shaped; throat naked; berry corky, divisible into two parts, each two seeded.

*Asperifoliae.*3. *Flowers one petaled, inferior, four seeded, seeds naked.*

V. ECHIUM. Corolla bell-shaped, irregular, throat naked, stigma deeply cloven.

VI. HELIOTROPIMUM. Corolla salver-shaped, five-cleft, with intermediate teeth; throat naked.



VII. PULMONARIA. Corolla funnel-shaped; throat naked; calyx with five acute angles and flat sides.

VIII. LITHOSPERMUM. Corolla funnel-shaped; throat naked; calyx in five deep segments.

IX. ONOSMA. Corolla bell-shaped; throat naked, distended.

X. SYMPHYTUM. Corolla funnel-shaped; border tubular, swelling; throat closed with awl-shaped rays.

XI. BORAGO. Corolla wheel-shaped, border spreading, segments acute; throat closed with rays.

XII. LYCOPSIS. Corolla funnel-shaped, tube curved; throat closed with convex scales.

XIII. CYNOGLOSSUM. Corolla funnel-shaped; throat closed with convex valves; seeds flat, fixed to the style by their inner side.

XIV. ANCHUSA. Corolla funnel-shaped; throat closed with convex valves; tube prismatic at the base; seeds engraved at the base.

XV. MYOSOTIS. Corolla salver-shaped; five cleft, slightly notched; throat closed with valves.

4. *Flowers one petaled, inferior, five seeded.*

XVI. NOLANA. Corolla bell-shaped; style amongst the germs; seeds five, berry-like; two celled.

5. *Flowers, one petaled, inferior, seeds in a vessel.*

XVII. HYDROPHYLLUM. Corolla bell-shaped,



with five honey-bearing longitudinal scores in the inside; stigma two cleft; capsule globular, two valved.

XVIII. CORTUSA. Corolla wheel-shaped; tube short; the throat closed with an elevated ring; capsule oval, one celled; top five valved.

XIX. ANAGALLIS. Corolla wheel-shaped; stamens hairy; capsule one celled, opening horizontally.

XX. LYSIMACHIA. Corolla wheel-shaped; stigma obtuse; capsule globular, pointed with ten valves.

XXI. CYCLAMEN. Corolla wheel-shaped; border reflected; tube short; throat prominent; stigma acute; capsule one celled, pulpy.

XXII. DODECATHEON. Corolla wheel-shaped; border reflected; stamens standing on the tube; capsule one celled, oblong; stigma obtuse.

XXIII. SOLDANELLA. Corolla bell-shaped, torn in many clefts; anthers beaked; capsule cylindrical, one celled; many toothed at top.

XXIV. PRIMULA. Tube of the corolla cylindrical, with a spreading mouth; throat naked; stigma globose; calyx tubular, five angled; capsule one celled; mouth ten cleft; involucre small.

XXV. ANDROSACE. Corolla salver-shaped; tube ovate; throat contracted, glandulous; capsule one celled, globular; stigma globose; involucre of many small leaves.



XXVI. ARETIA. Corolla salver-shaped, five cleft; tube ovate; capsule one celled, globular; five seeded; stigma flat-headed.

XXVII. HOTTONIA. Corolla salver-shaped; stamens inserted in the throat of the corolla; stigma globose, capsule one celled.

XXVIII. MENYANTHES. Corolla funnel-shaped; hairy; stigma cloven; capsule one celled.

XXIX. SPIGELIA. Corolla funnel-shaped; stigma simple; capsule two celled, many seeded.

XXX. CONVULVULUS. Corolla bell-shaped, plaited; stigmas two; capsule two celled; cells two seeded.

XXXI. DATURA. Corolla funnel-shaped, plaited; calyx tubular, angular, partly deciduous; capsule two celled; four valved.

XXXII. HYOSCYAMUS. Corolla funnel-shaped; obtuse, irregular; stamens inclined; capsule covered with a lid, two celled.

XXXIII. NICOTIANA. Corolla funnel-shaped; border plaited, five cleft, stamens inclined; capsule two valved, two celled; stigma headed.

XXXIV. VERBASCUM. Corolla wheel-shaped, somewhat unequal; stamens distant, declining, bearded; capsule of two cells and two valves; stigma simple.

XXXV. DIAPENSIA. Corolla salver-shaped, five cleft; calyx of five leaves, encompassed by three others; stamens crowning the tube of the corolla; capsule three cells.



XXXVI. *CHIRONIA*. Corolla salver-shaped; stamens inserted into the tube; anthers after flowering finally becoming spiral; style drooping; capsule two celled.

XXXVII. *PHLOX*. Corolla salver-shaped, with a curved tube; filaments unequal; stigma three cleft; calyx prism-form; capsule three celled, one seeded.

XXXVIII. *POLEMONIUM*. Corolla in five deep segments, closed at the bottom by valves bearing the stamens; stigma three cleft; capsule three celled.

XXXIX. *IPOMÆA*. Corolla somewhat funnel-shaped, with five plaits; stigma headed globose; capsule three celled.

XL. *AZALEA*. Corolla bell-shaped; stamens inserted into the receptacle; stigma obtuse; capsule five celled.

XLI. *NERIUM*. Corolla salver-shaped, contorted; the throat crowned with five leaflets; anthers awned; follicles two, erect; seeds having a pappus, or down.

XLII. *AMSONIA*. Corolla funnel shaped; its limb in five deep oblique segments; anthers arrow-shaped within the tube; follicles two, erect, cylindrical; seeds naked.

XLIII. *VINCA*. Corolla salver-shaped, contorted; follicles two, erect; seeds naked.

XLIV. *CAPSICUM*. Corolla wheel-shaped; berry two celled, juiceless; anthers converging, seeds compressed.

XLV. *SOLANUM*. Corolla wheel-shaped; anthers



somewhat united, gaping at top with a double pore; berry two celled.

**XLVI. PHYSALIS.** Corolla wheel-shaped, plaited; anthers converging; berry two celled, within an inflated membranous calyx.

**XLVII. ATROPA.** Corolla bell-shaped; stamens distant; berry globular, two celled.

**XLVIII. ELLISIA.** Corolla funnel-shaped, narrower than the calyx; capsule two celled, two valved, two seeds in each, dotted one above the other.

**XLIX. LYCIUM.** Corolla tubular; the throat closed with the beards of the filaments; berry two celled, many seeded.

**L. SIDEROXYLON.** Corolla five cleft; nectary five scales between the stamens; stigma simple; berry five seeded.

*3. Flowers one petaled, superior.*

**LI. SAMOLUS.** Corolla salver-shaped; stamens protected by five scales; capsule one celled, with five teeth.

**LII. PHYTEUMA.** Corolla wheel-shaped, five parted; segments linear; stigma two or three cleft; capsule two or three celled.

**LIII. TRACHELIUM.** Corolla funnel-shaped; stigma globuse; capsule of three cells, bursting by pores at the base.

**LIV. CAMPANULA.** Corolla bell-shaped, the bot-



tom closed by valves bearing the stamens; stigma three cleft; capsule gaping, with lateral pores.

LV. LOBELIA. Corolla irregular; calyx five cleft; anthers cohering, incurved; capsule two or three-celled.

LVI. COFFEA. Corolla salver-shaped; stamens inserted into the tube; berry one or two seeded; seeds arilled.

LVII. LONICERA. Corolla tubular, irregular; berry two celled, many seeded; stigma round headed.

LVIII. TRIOSTEUM. Corolla tubular, nearly equal; the same length as the calyx; berry three celled, one seeded; stigma oblong.

IV. *Rubia.* IV. *Crucianella.* VI. *Prinos.*

7. *Flowers five petaled, inferior.*

LIX. RHAMNUS. Calyx tubular; corolla of five small petals defending the stamens; berry three celled, round.

LX. ZIZIPHUS. Calyx flattish, in five deep segments; corolla of five petals, opposite to the stamens; drupe superior, nut one or two celled.

LXI. CEANOTHUS. Corolla petals clawed; sack-form vaulted, opposite the stamens; calyx tubular; berry three celled, three seeded.

LXII. CELASTRUS. Petals spreading; capsule three angled, three celled; seeds arilled; calyx flat.



**LXIII. EUONYMUS.** Calyx flat; capsule five sided, five celled, five valved; coloured; seeds in a pulpy covering.

**LXIV. VITIS.** Petals cohering at the summit; small, shrivelling, berry, five-seeded; seeds ovate.

**LXV. IMPATIENS.** Corolla irregular, with a hooded nectary; anthers cohering; calyx two-leaved; capsule five valved, elastic.

**LXVI. VIOLA.** Corolla irregular, spurred behind; calyx five leaved; capsule one celled, three valved; anthers united.

**LXVII. CLAYTONIA.** Calyx two valved; stigma three cleft; capsule three valved, one celled, three seeded.

**LXVIII. ITEA.** Petals of the corolla long, inserted into the calyx; capsule two valved; two celled; many seeded; stigma notched.

*8. Flowers five petaled, superior.*

**LXIX. RIBES.** Calyx superior, five cleft, tubular; petals of the corolla and the stamens inserted into the calyx; style cloven, berry many seeded.

**LXX. HEDERA.** Petals of the corolla dilated at the base; calyx five-toothed; berry with five seeds, encompassed by the calyx.

**LXXI. LAGÆCIA.** Umbellate; involucre, both general and partial; petals cloven; seeds solitary.



9. *Flowers incomplete, inferior.*

LXXII. ILLECEBRUM. Corolla none; calyx five-leaved, cartilaginous; stigma simple; capsule five valved, one seeded.

LXXIII. CELOSIA. Corolla five petaled; calyx of three leaves, similar to the petals of the corolla; stamens conjoined at the base to the plaited nectary; capsule gaping, horizontally.

VIII. *Polygonum amphibium.*10. *Flowers incomplete, superior.*

LXXIV. THESIUM. Corolla none; calyx tubular, bearing the stamens, seed one.

*Order Digynia.*1. *Flowers one petaled, inferior.*

LXXV. STAPELIA. Corolla wheel-shaped; five cleft, large, fleshy; nectary a double star covering the stamen and pistils; follicles two.

LXXVI. CYNANCHUM. Corolla wheel-shaped, contorted; nectary cylindrical, five toothed; follicles two.

LXXVII. PERIPLOCA. Corolla wheel-shaped, contorted; nectary surrounding the fructification, protruding five filaments, follicles two; cylindrical widely spreading.

LXXVIII. APOCYNUM. Corolla bell-shaped; nec-



taries five, glandular, alternate with the stamens; follicles two.

LXXIX. ASCLEPIAS. Corolla reflected; contorted; nectaries five, egg-shaped, concave, protruding a little horn; follicles two.

LXXX. SWERTIA. Corolla wheel-shaped, with two nectariferous pores at the base of each segment; capsule one celled, two valved; seeds numerous.

LXXXI. GENTIANA. Corolla tubular, border five cleft, destitute of nectariferous pores; capsule one celled, two valved, many seeded.

### 2. *Flowers five petaled, inferior.*

LXXXII. VELEZIA. Calyx tubular, with five thread-form teeth; petals of the corolla, with long claws; capsule one celled; seeds numerous, in a single row.

LXXXIII. HEUCHERA. Petals of the corolla inserted into the calyx; capsule two celled, two beaked.

#### *Staphylea pinnata.*

### 3. *Flowers incomplete.*

LXXXIV. SALSOLA. Corolla none; calyx deeply five cleft; capsule one seeded; seed spiral, like a snail's shell.

LXXXV. CHENOPodium. Corolla none; calyx five leaved, finally shutting close, and becoming a five-angled pericarp; seed one, lentil form.

LXXXVI. BETA. Corolla none; seed one, kidney-



shaped; calyx five-leaved, fleshy, with the seed immersed in its base.

LXXXVII. GOMPHRENA. Calyx coloured; the outer of three leaves, the inner in five deep segments; corolla tubular, five toothed, bearing the stamens at its orifice; capsule one seeded; bursting all round.

LXXXVIII. ULMUS. Corolla none; calyx four or five-cleft, permanent; capsule membranous, compressed, flat, one-seeded.

4. *Flowers five petaled, superior.*

LXXXIX. PHYLLIS. Stigmas rough; calyx of two leaves; seeds two, flowers dispersed.

VIII. *Polygonum virginianum.*

*Umbellatæ.*

A. *Involucre, both general and partial.*

XC. ERYNGIUM. Involucre of many leaves; flowers in heads; receptacle chaffy, seeds bristly.

XCI. SANICULA. Umbels crowded, somewhat headed; fruit rough; florets uniform, central ones with stamens only.

XCII. ASTRANTIA. Partial involucre lance-shaped, expanding, equal, long, coloured; florets many; those of the ray abortive; seeds wrinkled.

XCIII. HERACLEUM. Seed elliptic, notched at the end, compressed, scored, dilated at the margin;



flowers radiate, petals bent inwards, end-nicked; general involucre deciduous.

xciv. DAUCUS. Involucre wing-cleft; flowers somewhat radiate; central flowers abortive; seeds prickly.

xcv. TORDYLIUM. Flowers radiate, all perfect; involucre long and undivided; fruit roundish, compressed, flat, notched at the margin.

xcvi. CAUCALIS. Flowers radiate; flowers of the centre male; fruit somewhat egg-shaped, scored, armed with rigid bristles; leaflets of the involucre undivided.

xcvii. CORIANDRUM. Flowers radiate; petals bent in, notched; general involucre one leaved or none; partial involucre going half-way round, or none; fruit round.

xcviii. LASERPITIUM. Flowers uniform, petals bent up, nicked; spreading, seeds oblong, with eight membranous angles.

xcix. PEUCEDANUM. Flowers uniform; central florets, abortive; seeds egg-shaped, scored on both sides, encompassed by a membrane; involucre very short.

c. AMMI. Flowers radiate, all fertile; involucre wing-cleft; seeds smooth, gibbous.

ci. BUNIUM. Flowers uniform; umbel crowded; seed ovate.

cii. SELINUM. Flowers uniform, heart-shaped; involucre reflexed; seed oblong, compressed, scored down the middle.



CXXI. CICUTA. Flowers uniform, fertile; seeds somewhat egg-shaped, furrowed.

CXXII. ÆTHUSA. Flowers somewhat radiate, fertile; involucellums halved; pendulous, seeds scored.

CXXIII. SESELI. Flowers uniform, fertile; involucellum of one or two leaflets; seeds egg-shaped, scored.

*Bupleurum rotundifolium*; *Angelica sylvestris*;  
*Apium petroselinum*; *Pimpinella anisum*.

*C. Involucre none, neither general nor partial.*

CXXIV. SMYRNIUM. Flowers uniform, central ones barren; petals keeled, pointed; seeds oblong, gibbous, with angular ribs.

CXXV. CARUM. Flowers uniform, central ones barren; petals keeled, notched, united; an involucre of one leaf; seeds small, elliptic curved, scored.

CXXVI. THAPSIA. Flowers uniform, all fertile; petals uniform, bent in, lance-shaped; seeds oblong, encompassed with a membranous border.

CXXVII. PASTINACA. Flowers uniform, fertile; petals rolled inwards, entire; seeds elliptical, compressed, almost flat, leaf-like.

CXXVIII. ANETHUM. Flowers uniform, fertile; petals entire, rolled inwards; seeds oval, compressed, small, scored, bordered.



**CXXXIX. APIUM.** Flowers uniform, fertile; petals equal, bent in; an involucre of one leaf; seed small; bulging, ribbed.

**CXXX. PIMPINELLA.** Flowers uniform, fertile; petals bent inwards; stigmas globose; seed egg-oblong, scored; umbels nodding before flowering.

*Order Trigynia.*

*1. Flowers superior.*

**CXXXI. VIBURNUM.** Corolla in five segments; calyx deeply five-cleft, superior; berry with a single seed.

**CXXXII. SAMBUCUS.** Corolla in five shallow segments; calyx five-cleft; berry three seeded.

*2. Flowers inferior.*

**CXXXIII. RHUS.** Corolla of five petals; calyx in five deep segments; berry with one seed.

**CXXXIV. CASSINE.** Corolla deeply five-cleft, almost to the base; segments alternate with the stamens; calyx five-cleft; style none; stigmas three; berry dry, three seeded.

**CXXXV. STAPHYLEA.** Corolla of five petals; calyx inferior, five-cleft; capsules inflated, joined together; seeds two, globose, with a scar.

**CXXXVI. TAMARIX.** Corolla of five petals; calyx deeply five-cleft, inferior; capsule one celled, three valved; seeds numerous, with a feathery crown.



CXXXVII. DRYPIS. Corolla of five petals, cloven, with two small teeth at the base of each; calyx with five teeth; capsule bursting horizontally; one seeded.

CXXXVIII. SAROTHRÆ. Corolla five petaled; calyx in five deep segments; capsule coloured, of one cell and three valves; seeds numerous, inserted into the margin of the valves.

CXXXIX. TELEPHIUM. Corolla of five petals, inserted into the receptacle; calyx of five leaves; capsule one celled, three valved, many seeded.

CXL. PHARNACEUM. Calyx five leaved, coloured internally; corolla none; capsule superior, of three cells, with many seeds.

*Zizyphus Paliurus.*

*Order Tetragynia.*

CXLI. PARNASSIA. Corolla of five petals; calyx cleft in five segments; nectaries five, fringed with bristles terminating in a globule.

*Order Pentagynia.*

1. *Flowers superior.*

CXLII. ARALIA. Flowers in an umbel, with an involucre; calyx five-toothed superior; corolla five petaled; berry five seeded.

2. *Flowers inferior.*

CXLIII. CRASSULA. Corolla five petals; calyx



five-cleft; five nectareous scales at the base of the germ; capsules five; seeds numerous.

**CXLIV. LINUM.** Corolla five petals; calyx five petals; capsule with ten cells and ten valves; seeds solitary.

**CXLV. STATICE.** Corolla five petals; calyx one leaved, entire, with a plaited skinny border; capsule one celled, five valved at the base; seed solitary.

*Order Polygynia.*

**CXLVI. XANTHORHIZA.** Corolla of five petals; nectaries five, abrupt, stalked; calyx none; capsule five or more; one seeded.

CLASS V.

PENTANDRIA.

*Order Monogynia.*

1. **MIRA'BILIS**, from the Latin, on account of the wonderful diversity of colours in the flower. Nat. ord. not arranged by Linnæus. *Juss.* Nyctagines. 3 Species.

1. **M. Jala'pa.** *Common Marvel of Peru.* "Flowers crowded, terminal, erect, on foot-stalks; leaves nearly smooth;" corolla remarkably varying in colour, scarlet, white, yellow, or striped with all these



colours or speckled, on the same plant. June to September. Both Indies. 1596. P.

2. *M. Dichotoma. Forked Marvel of Peru.* "Flowers nearly sitting, axillary, solitary, erect;" leaves slightly downy at the margin; flowers from the forks of the stem, of a scarlet red, not varying; florets resembling the former species, but smaller. August. Mexico. 1628. P.

3. *M. Longiflora. Long-flowered Marvel of Peru.* "Flowers crowded, terminal, sitting, very long, slightly drooping; leaves downy;" calyx clammy and foetid; tube of the corolla green purplish, border white, with a purple eye; anthers orange. September. Mexico. 1759. P.

These plants are tender, and the flowers of a delicate scent, opening in the afternoon, making a fine appearance; the first species was one of the earliest productions of the new world, cultivated in England, and was thought for a long time to be the Jalap of the shops, as was also the second species: but the drug is now understood to be the root of *Convolvulus Jalapa*.

II. *PLUMBA'GO*, from *plumbum*, lead, on account of the colour of the leaves. Nat. ord. by *Linn.* not determined. *Juss.* *Plumbagines.* 7 Species.

1. *P. Europæa. Common Leadwort.* "Leaves stem-clasping, lance-shaped, oblong, rugged;" stems many, with many branches, each terminating in a simple dense spike of small pale purple flowers, with a bristly calyx; not a very common plant; if the



autumn does not prove warm it scarcely flowers.  
October. South of Europe. 1597. P.

III. CERIN'THE, from κηρος, wax, because bees were supposed to obtain abundance of wax from it. Nat. ord. *Liun. Asperifoliæ. Juss. Boragineæ.* 3 Species.

1. C. Ma'jor. *Great Honey-wort.* "Leaves clasping the stem; corolla obtuse, expanding;" leaves glaucous, smooth, dotted with white; branches leafy, with flowers on long foot-stalks; tube of the corolla yellow, border purple; stamens shorter than the corolla. July, August. South of Europe. 1596. A.

2. C. As'pera. *Rough Honey-wort.* "Stamens as long as the corolla," which is yellow; leaves prickly, smaller than the last. August. Italy. 1683. A.

3. C. Mi'nor. *Small Honey-wort.* "Leaves clasping the stem, entire, oblong; corolla acute, closed;" flowers small, yellow, on long leafy bunches; corolla contracted at the top and bottom; there is a variety with broader leaves; the corolla yellow, but purplish towards the border. June to October. Austria. 1570. B.

IV. MESSERCHMI'DIA, named by Linnæus in honour of a German botanist, Messerschmid. Nat. ord. *Liun. Asperifoliæ. Juss. Boragineæ.* 3 Species.

1. M. Argu'zia. *Herbaceous Messerschmidia.* "Stem herbaceous a span high, leaves, sitting; corolla



funnel form;" leaves ovate, veined, hoary; bunches of flowers often two; corolla white. July. Siberia. 1780. P.

v. E'CHIUM, from  $\epsilon\chi\epsilon$ , a viper, its seeds resembling a viper's head. Nat. ord. Linn. Asperifoliæ. Juss. Boragineæ. 26 Species.

1. E. Plantaginæum. *Plantain-leaved Viper's Bugloss*. "Root-leaves ovate, marked with lines, on foot-stalks;" stem-leaves lance-shaped, sitting; corolla violet coloured. July to October. Italy. 1776. A.

2. E. Italicum. *Wall Viper's Bugloss*. "Stem herbaceous, hairy; leaves linear, lance-shaped, hispid, shaggy, lower ones nerved; stamens longer than the corolla;" flowers in short spikes on the sides of the branches; small, white or purplish. August. Jersey. B.

3. E. Ru'brum. *Red Viper's Bugloss*. "Stem erect, hispid; leaves linear, lance-shaped, hairy; spike compound, terminal; corollas nearly equal;" flowers rather small, pale red. July. Hungary. 1791. B.

4. E. Vulga're. *Common Viper's Bugloss*. "Stem tubercled and hispid; stem-leaves lanceolate, hispid; flowers numerous, in lateral spikes;" stem spotted with red; corolla, before expanding red, afterwards blue, varying sometimes to pale red or white; stamens long, red. June. Britain. B.



Var. 1. *Violaceum*, flowers always blue; stamens equal to the corolla; plant smaller.

5. *E. Cre'ticum*. *Cretan Viper's Bugloss*. "Stem procumbent; calyxes distant;" leaves lanceolate, hairy, sessile; flowers in slender spikes on long peduncles, large, deep red. July to September. The Levant. 1683. A.

6. *E. Orienta'le*. *Oriental Viper's Bugloss*. "Stem branched; stem-leaves egg-shaped; flowers solitary, lateral;" lower leaves sixteen inches long, cottony beneath; flowers an inch and a half long, pale blue, with two red bands on three of the segments. July. The Levant. 1780. A.

7. *E. Lusita'nicum*. *Portugal Viper's Bugloss*. "Stamens shorter than the corolla;" stem two feet high; the flowers in short spikes, purplish; leaves lanceolate, ovate. July. South of Europe. 1731. A.

VI. *HELIOTRO'PIUM*, from *ἥλιος*, the sun, and *τροπω*, to turn, because the leaves or flowers were supposed to turn with the sun. Nat. ord. *Linn.* *Asperifoliæ*. *Juss.* *Boragineæ*. 22 Species.

1. *H. Peruvia'num*. *Peruvian Turnsole*. "Leaves lance egg-shaped; stems shrubby;" spikes numerous, collected into a corymbus; flowers blueish white, of an almond scent. July. Peru. 1757. Gr. Ho. S.

2. *H. Europæ'um*. *European Turnsole*. "Leaves egg-shaped, entire, woolly, wrinkled; spikes in



pairs;" flowers small, white. June to October. South of Europe. 1562. A.

3. *H. Supinum*. *Trailing Turnsole*. "Leaves egg-shaped, entire, downy, plaited; spikes solitary;" branches prostrate; plant smaller than the last; flowers white. July. South of Europe. 1640. A.

The first species is much cultivated in green-houses for its delightful odour; the other two are ornamental border plants.

VII. *PULMONA'RIA*, from *pulmo*, the lungs, the leaves being spotted like diseased lungs; or from some species being thought useful in pulmonary diseases. Nat. ord. *Linn.* *Asperifoliæ*. *Juss.* *Boraginæ*. 7 Species.

1. *P. Angustifolia*. *Narrow-leaved Lung-wort*. "Stem-leaves oblong, lanceolate, clasping; root-leaves elliptical, all of them rough;" calyx nearly as long as the tube; leaves scarcely spotted; spikes terminal, in pairs; corolla purplish blue; before blowing red. May. Germany. 1731. P.

2. *P. Officinalis*. *Common Lung-wort*. "Leaves shaggy, those on the stem clasping, egg-oblong; root-leaves somewhat heart-shaped," dark green above marked with whitish spots, pale and unspotted beneath; flowers in small bunches, red, purple, and blue, in the same bunch. April. Britain. P.

3. *P. Paniculata*. *Panicled Lung-wort*. "Calyx short, five parted, hairy; leaves egg-oblong, pointed,



hairy ;" corolla blue or white. May and June. Hudson's Bay. 1778. P.

4. *P. Virg'nica*. *Virginian Lung-wort*. "Calyx short, very smooth ; leaves lance-shaped, obtuse," glaucous ; flowers in clusters, drooping, before expanding of a reddish purple, after of a fine sky blue varying to white and flesh-colour. April. Virginia. 1699. P.

5. *P. Mari'tima*. *Sea Lung-wort*. "Calyx short, leaves ovate, glaucous ; stem branched, procumbent, widely spreading ;" leaves, when chewed in a recent state, having the flavour of a raw oyster ; flowers in bunches, terminal, of a purplish blue, pink in the bud. July. Britain. P.

VIII. LITHOSPER'MUM, from λίθος, a stone, and σπέρμα, seed, the seeds being of a stony hardness Nat. ord. *Linn.* Asperifoliae. *Juss.* Boraginæ. 16 Species.

1. *L. Officina'le*. *Common Officinal Gromwell*. "Seeds polished ; corolla scarcely longer than the calyx ; leaves lanceolate," veiny, rather acute ; plant of a dusky green ; flowers small, pale yellow, in leafy spikes. May. Britain. P.

2. *L. Arven'se*. *Corn Gromwell, or Bastard Alkenet*. "Seeds rugged ; corolla hardly longer than the calyx ; leaves of the calyx lance-shaped ;" leaves obtuse without lateral veins ; corolla white ; a common weed amongst corn ; the bark of the root affords



a fine red stain, with which, in Sweden, the country girls stain their cheeks. May. Britain. A.

3. *L. Purpu'reo Cæru'leum. Creeping Purple Gromwell.* "Seeds smooth and even; corolla twice as long as the calyx;" leaves lanceolate, somewhat hairy; stem scarcely branched, terminating in a forked leafy cluster of purple flowers, with a pale reddish tube. May. England. P.

4. *L. Frutico'sum. Shrubby Gromwell.* "Stem shrubby, erect; leaves linear, hispid; stamens equaling the corolla;" segments of the corolla slightly pointed; tube hairy; flowers in short reflex spikes of a vivid blue; leaves copious, like rosemary. June. South of Europe. 1685. P.

5. *L. Orienta'le. Yellow Gromwell.* "Seeds rough, with sharp points; spikes oblong, leafy; leaves oblong, wavy;" corolla, full, yellow; segments roundish; floral leaves somewhat heart-shaped, sometimes ovate. June. The Levant. 1713. P.

6. *L. Virginia'num. Virginian Gromwell.* "Corolla longer than the calyx, rough on the outside; leaves ovate, acute, hispid, nerved;" sessile, alternate; flowers in short spikes at the end of the branches, white. June. Virginia. 1759. P.

The seeds of the first species, from their remarkable pearly whiteness and polish, formerly excited the attention of medical practitioners, under the name of *Milium Solis*, and were supposed to be useful in calculous disorders.



IX. ONOS'MA, from *οσμη*, a sweet odour. Nat. ord. *Linn.* Asperifoliæ. *Juss.* Boragineæ. 8 Species.

1. O. Simplicis'sima. *Simple Onosma*. "Leaves clustered, crowded, lanceolate, linear, hairy; fruit erect;" corolla swelling; flowers terminal, white, in two clusters at the ends of the stems. March to June. Siberia. 1768. P.

2. O. Orienta'lis. *Oriental Onosma*. "Leaves linear, hairy; fruit pendulous;" stem round, hairy; leaves alternate, sessile; flowers on stalks, yellow; corolla cylindrical, obtuse; flowers yellow, in clusters at the end of the branches; the whole herb very hairy. March to June. South of Europe. 1685. P.

X. SYM'PHYTUM, *συμφυον*, to cement, from its supposed quality of uniting the lips of a wound. Nat. ord. *Linn.* Asperifoliæ. *Juss.* Boragineæ. 3 Species.

1. S. Officina'le. *Common Comfrey*. "Leaves ovate, lanceolate, decurrent;" stem three feet high, erect, leafy, hairy; clusters of flowers in pairs on stalks, with sometimes a third flower between the stalks; corolla yellowish white; but there is a variety more frequent in gardens of a red purplish or blueish colour. June. Britain. P.

2. S. Tubero'sum. *Tuberous-rooted Comfrey*. "Leaves ovate, slightly decurrent, upper ones opposite;" stem a foot high; clusters in pairs; flowers few, yellowish or greenish white. May to October. Britain. P.



3. *S. Orientale*. *Eastern Comfrey*. "Leaves ovate, slightly stalked;" stems two feet high; leaves rough, prickly; flowers of a blue colour. June. Turkey. 1771. P.

The root of the first species abounds with a pure mucilage which has been used with success as an emollient.

XI. BORA'GO, from *cor*, the heart, by changing the first letter, and *ago*, to excite, on account of its supposed cordial virtues. Nat. ord. *Linn. Asperifoliae*. *Juss. Boragineæ*. 7 Species.

1. *B. Officina'lis*. *Common Borage*. "All the leaves alternate; calyxes spreading;" leaves oval, wrinkled, rough with bristles; corolla blue, varying to flesh colour and white; anthers black. June to September. Britain. A.

2. *B. Orient'alis*. *Oriental Borage*. "Calyx shorter than the tube of the corolla; leaves heart-shaped;" flowers axillary and terminating, paniced; corolla white, border reflexed. April. The Levant. 1752. P.

The first species was formerly in repute for its exhilarating qualities, but it has long lost its reputation, being now used only as an ingredient in the summer drink called a cool tankard, its leaves containing a considerable quantity of nitre.

XII. LYCOP'SIS, from *λυκος*, a wolf, and *ψις*, the face, the corolla having a grinning appearance. Nat. ord. *Linn. Asperifoliae*. *Juss. Boragineæ*. 9 Species.



1. *L. Vesica'ria*. *Bladder-podded Wild Bugloss*. "Leaves entire; stem prostrate; calyxes inflated, pendulous;" leaves lanceolate, sessile, pubescent; corolla small, and brown; as the flower withers the calyx swells into a sort of bladder. July. South of Europe. 1770. A.

2. *L. Pul'la*. *Dark-flowered Wild Bugloss*. "Leaves entire; stem upright; calyxes inflated, pendulous;" root creeping; leaves and calyxes rough; corolla dark purple, small, much resembling, but more woolly than the preceding. June. Germany. 1648. A.

3. *L. Variega'ta*. *Variegated Wild Bugloss*. "Leaves spreading, toothed, callous; stem decumbent; corolla drooping;" leaves small, spear-shaped, warted; flowers small, bright blue, in bunches at the end of the branches, varying into red, sometimes with white streaks. July. Crete. 1804. A.

4. *L. Arven'sis*. *Small Wild Bugloss*. "Leaves lance-shaped, hispid; calyx while in flower upright;" flowers small, blue with a white eye, in spikes; corolla varying to red or white. June to August. Britain. A.

XIII. CYNOGLOS'SUM, κυνος, a dog, and γλωσσα, a tongue, from the shape of the leaves. Nat. ord. *Linn.* *Asperifoliæ*. *Juss.* *Boraginææ*. 24 Species.

1. *C. Officina'le*. *Common Hound's Tongue*. "Stamens shorter than the corolla; leaves broad, lance-shaped, tapering towards the base, downy, sit-



ting; segments of the calyx, oblong;" flowers in naked bunches, of a dull purplish red, sometimes with a white flower; whole plant fœtid, smelling like mice. May to September. Britain. B.

2. *C. Sylva'ticum*. *Green-leaved Hound's Tongue*. "Leaves lance spoon-shaped, shining, nearly naked, rough underneath," flowers bright green, at first reddish, afterwards blueish, smaller. By Linnaeus this plant was considered onlp as a variety of the last, but it has not its fœtid smell. June. Britain. B.

3. *C. Pic'tum*. *Madeira Hound's Tongue*. "Corolla and calyx nearly equal; lobes roundish; leaves lance-shaped, downy, upper ones heart-shaped at the base;" corolla pale blue or purplish, beautifully pencilled with deeper coloured veins. August. Madeira. 1777. P.

4. *C. Virgi'nicum*. *Virginian Hound's Tongue*. "Leaves spoon lance-shaped at top, linear at the base, three-nerved, shining;" floral-leaves clasping the stem; stem and leaves rough with hairs; flowers small, white, scattered. By some writers this species is arranged under *Myosotis*. July. Virginia. 1759. B.

5. *C. Cheirifo'lium*. *Silvery-leaved Hound's Tongue*. "Corolla twice the length of the calyx; leaves lanceolate," soft, sitting, half embracing the stem; flowers in naked bunches, white with red, blue, or purple veins. July. Spain. 1596. B.

6. *C. Apenni'num*. *Apennine Hound's Tongue*.



" Stamens equalling the corolla;" calyx shaggy; root-leaves ovate, pedicled, very large; stem covered with leaves; flowers in a panicle, at first dull red, afterwards blueish. April to June. The Apennines. 1731. B.

7. C. Linifolium. *Flax-leaved Hound's Tongue, or Venus's Navel-wort.* " Leaves linear, lanceolate, smoothed, toothed, and rugged about the edge," greyish; bunches of flowers long, erect; corolla white; seeds four, ovate, globular with a depression at the top, umbilical, whence the name of Navel-wort. June to August. Portugal. 1731. A.

8. C. Omphalodes. *Comfrey-leaved Hound's Tongue.* " Stem creeping, slender; root-leaves ovate, cordate; stem-leaves ovate, pedicled; upper leaves cordate, sessile;" racemes axillary; flowers blue with a white star in the middle. March to May. South of Europe. 1633. P.

XIV. ANCHUSA, from *αντι*, against, and *χω*, to pour out, from its astringent qualities. Nat. ord. *Linn.* Asperifoliæ. *Juss.* Boragineæ. 13 Species.

1. A. Officinalis. *Officinal Alkanet, or Bugloss.* " Leaves lance-shaped, bristled; spikes tiled, pointed one way, two together; calyx five-parted;" flowers sessile, at first opening red, afterwards purple, sometimes white; tube of the corolla melliferous. June to October. Britain. P.

2. A. Angustifolia. *Narrow-leaved Alkanet, or*



*Bugloss.* "Leaves oblong, lance-shaped, entire; racemes almost naked, two together;" leaves narrower, less hairy than the former; flowers small, red. May to August. South of Europe. 1759. P.

3. *A. Undula'ta.* *Wave-leaved Alkanet, or Bugloss.* "Bristly; leaves linear, toothed; flower-stalks less than the floral leaves; calyx while in flower inflated;" plant strong, three feet high; spikes of flowers axillary, long; corolla fine blue. May to August. South of Europe. 1739. P.

4. *A. Tincto'ria.* *Alkanet, or Dyer's Bugloss.* "Plant downy; leaves lance-shaped, obtuse; stamens shorter than the corolla;" plant bearing much resemblance to the first species, but more downy; corolla of the same colour; root of a deep purplish red. June to October. South of Europe. 1596. P.

5. *A. Sempervi'rens.* *Evergreen Alkanet, or Bugloss.* "Leaves ovate; flower-stalks two-leaved, in close bunches;" stem evergreen; border of the corolla blue, shining. March to July. Britain. P.

The roots of the fourth species are externally of a deep purplish red, which imparts a fine crimson to wax and unctuous substances, and to spirits of wine; to water it gives only a brownish hue. It was formerly in repute as an aperient, but is now used merely to colour extracts.

XV. *MYOSO'TIS*,  $\mu\upsilon\varsigma$ , a mouse, and  $\epsilon\varsigma\ \omega\tau\omicron\varsigma$ , the ear, from the soft and upright little leaves. Nat. ord. *Linn.* *Asperifoliz.* *Juss.* *Boragineæ.* 12 Species.



1. *M. Lap'pula*. *Prickly-seeded Mouse-ear Scorpion Grass*. "Seeds with hooked prickles; leaves lance-shaped, hairy," sessile, alternate; flowers blue or white, small, opposite to the leaves. April to August. Germany. 1683. A.

*M. Palustris*. Blue with a yellow eye: common on the banks of rivers in England, is a pretty plant, but rarely obtains a place in the garden.

XVI. *NOLA'NA*, from *nola*, a little bell, on account of the bell-shaped form of the flower. Nat. ord. *Linn.* Luridæ. *Juss.* Boragineæ. 1 Species.

1. *N. Prostra'ta*. *Trailing Nolana*. Stem herbaceous, branched, smooth; leaves alternate, stalked; rhomboid ovate, fleshy, unequal; corolla plaited, blue with purple streaks. July to September. Peru. 1761. A.

XVII. *HYDROPHYL'LUM*, from *υδωρ*, water, and *φυλλον*, a leaf, expressive of an aquatic leaf. Nat. ord. *Linn.* not arranged. *Juss.* Boragineæ. 2 Species.

1. *H. Virg'nicum*. *Virginian Water Leaf*. "Leaves wing-cleft;" radical leaves cut down nearly to the mid rib, veiny, shining; flowers from the root in loose clusters, rather inconspicuous, of a dirty white. June. Virginia. 1732. P.

2. *H. Canaden'se*. *Canadian Water Leaf*. "Leaves lobate, angular," very similar to the Maple-leaf; half



five-lobed; lobes acute and slightly toothed; flowers as in the former species. May. Canada. 1759. P.

XVIII. CORTU'SA, named by Mathiolus, an early Italian botanist, in honour of his friend Cortusus, professor of botany at Padua, in the sixteenth century. Nat. ord. *Linn.* Preciæ. *Juss.* Lysimachiæ. 2 Species.

1. C. Mathi'oli. *Bear's-ear Sanicle*. "Calyx shorter than the corolla;" leaves heart-shaped, crenate; flowers umbelled, reddish violet, sometimes white, sweet scented; involucre of three wedge-shaped, oval leaves. April to June. Siberia. 1596. P.

XIX. ANAGAL'LIS, from *αγασθαι*, to laugh, because by curing the spleen it disposes persons to be cheerful. Nat. ord. *Linn.* Rosacææ. *Juss.* Lysimachiæ. 6 Species.

1. A. Latifo'lia. *Broad-leaved Pimpernel*. "Leaves heart-shaped, clasping the stem; stem compressed," first erect, then spreading; peduncles axillary, solitary, one flowered; corolla blue, with a purplish base. July. Spain. 1759. A.

This plant is nearly allied to the native species A. Arvensis, or the Poor Man's Weather-glass, common in corn fields; with a scarlet or purplish corolla, which though a pretty plant, is not admitted into gardens unless it springs up as a weed.



XX. *LYSIMACHIA*, from *Lysimachus*, one of Alexander's generals; yet the literal meaning of the Greek is the same as the English, *Loose-strife*. Nat. ord. *Linn.* Rosaceæ. *Juss.* *Lysimachiæ*. 14 Species.

\* *Peduncles many flowered.*

1. *L. Vulgaris*. *Common Loose-strife*. "Racemes terminal, paniced; leaves ovate, lanceolate, acute;" stems erect, leafy, many flowered; leaves in pairs, but sometimes four or five; flowers yellow, handsome. July to September. Britain. P.

2. *L. Ephe'merum*. *Willow-leaved Loose-strife*. "Racemes simple, terminal; petals of the corolla inversely egg-shaped, expanding; leaves narrow, lance-shaped, sitting;" stamens shorter than the corolla; leaves dotted with brown underneath; flowers white, in a long close spike. July to September. Spain. 1731. P.

3. *L. Stric'ta*. *Upright Loose-strife*. "Racemes terminal; petals of the corolla lance-shaped, expanding; leaves lance-shaped, sitting;" stem square; leaves dotted, smooth; flower-stalks in a sort of whorl; corolla yellow with red stripes and dots. July. North America. 1781. P.

4. *L. Du'bia*. *Purple-flowered Loose-strife*. "Racemes terminal; petals of the corolla approaching; stamens shorter than the corolla; leaves lance-shaped, on foot-stalks;" flowers sessile in a spike, deep red, nearly allied to No. 2. August. The Levant. 1759. B.



5. *L. Thyrsiflora*. *Tufted Loose-strife*. "Racemes lateral; flower-stalks clustered;" stem simple, round, leafy; leaves opposite, sessile, acute, dotted; flowers yellow, sometimes spotted with red. July to September. Britain. P.

\*\* *Peduncles, one flowered.*

6. *L. Quadrifolia*. *Four-leaved Loose-strife*. "Leaves in fours; peduncles in fours;" leaves opposite, sessile; branches axillary to the leaves; petals of the corolla sharply pointed, bright yellow; the plant of a blackish green. August. North America. 1794. P.

7. *L. Punctata*. *Dotted Loose-strife*. "Leaves mostly in fours; flower-stalks in whorls;" leaves ovate, lanceolate, frequently spotted with black on the lower side; flowers small, yellow with tawny dots at the base of the petals; calyx pubescent. July. Holland. 1759. P.

8. *L. Ciliata*. *Fringed Loose-strife*. "Leaf-stalks fringed; flowers drooping;" leaves oblong, smooth; flowers axillary, yellow, each on a long stalk. By Linnæus thought to be only a variety of *L. Quadrifolia*. August. North America. 1759. P.

9. *L. Linum Stella'tum*. *Small Loose-strife*. "Calyx longer than the corolla; stem erect, much branched;" two or three inches high; leaves sessile, lanceolate; flowers small, pale green. June. France. 1776. A.

10. *L. Ne'morum*. *Wood Loose-strife, or Yellow*



*Pimpernel*. "Leaves egg-shaped, acute; flowers solitary; stem procumbent; stamens smooth;" stem creeping, round, reddish, leafy; leaves opposite on foot-stalks; flower-stalks axillary, solitary, slender; flowers delicate yellow. June. Britain. P.

11. *L. Nummularia*. *Creeping Loose-strife, Money-wort, or Herb Two-pence*. "Leaves rather heart-shaped; flowers solitary; stem creeping; stamens glandular;" stem compressed with four membranous edges; flower-stalks generally two together; corolla pale lemon-coloured. June. Britain. P.

This plant, says Gerarde, is called "*Nummularia* of the form of money, whereunto the leaves are like." The leaves are slightly acid, and were formerly thought to be anti-scorbutic; but they are not noticed in modern practice. *L. Ephemerum* is the most shewy plant of the genus.

XXI. CY'CLAMEN, from κυκλος, a circle, in reference to the round form either of the leaves or root. Nat. ord. *Linn. Preciæ. Juss. Lysimachix. 5 Species.*

1. *C. Co'um*. *Round-leaved Cyclamen*. "Leaves orbicular, heart-shaped, entire," on weak short foot-stalks, deep green above, reddish beneath, but this colour goes off in the spring; flowers bright purple. February. South of Europe. 1731. P.

2. *C. Europæ'um*. *Common European Cyclamen*. "Leaves heart-shaped, angular, toothed," on long foot-stalks, spotted above, reddish beneath; flowers



purple, drooping, sweet scented ; flower-stalks erect with the flower ; spiral with the fruit. April. Austria. 1596. P.

3. *C. Per'sicum*. *Persian Cyclamen*. "Leaves ovate, oblong, heart-shaped, crenate, with purple veins, on foot-stalks six inches long, purple, fleshy ;" flowers pure white with a purple bottom, sometimes all white ; very fragrant. February. Cyprus. 1731. Gr. Ho. P.

4. *C. Hederæfo'lium*. *Ivy-leaved Cyclamen*. "Leaves heart-shaped, angled, toothed," veined, smooth, with white and purplish spots, on long foot-stalks, numerous ; flowers drooping, either white or purple, appearing in August before the leaves, which spring out soon after, continue growing all the winter, and remain green till May, when they wither ; flower-stalks, after blowing, twist up like a screw, and lie close to the ground. A doubtful native of England. April. Italy. 1596. P.

XXII. DODECA'THEON, from δώδεκα, twelve, and θεοι, Gods, an old name of a plant in Pliny : by some thought to be the cowslip, applied by Linnæus to this American plant, on account of its resemblance. Nat. ord. Linn. Preciæ. Juss. Lysimachiæ. 1 Species.

1. *D. Mead'ia*. *American Cowslip* or *Meadia*. Leaves smooth, radical, six inches long, two and a half broad, at first erect, then spreading ; flower-stalks three or four, ending in umbels of about twelve



spokes, each bearing a purplish flower, or inclining to a peach colour. May. North America. 1744. P.

XXIII. SOLDANELLA, from *solidus*, a piece of money, in allusion to the orbicular form of the leaves. Nat. ord. *Linn.* *Preciæ.* *Juss.* *Lysimachiæ.* 1 Species.

1. S. Alpina. *Alpine Soldanella.* Stem none; leaves stalked, spreading, round, smooth, paler underneath; flower-stalks bearing two or three drooping flowers of a purplish blue, sometimes white, with a red calyx. A most delicate and elegant Alpine plant. April. Austria. 1656. P.

XXIV. PRIMULA, from *primus*, first, being one of the earliest flowers of the Spring. Nat. ord. *Linn.* *Preciæ.* *Juss.* *Lysimachiæ.* 18 Species.

1. P. Vulgaris, by some Acaulis. *Common Primrose.* "Leaves toothed, wrinkled; stalks single flowered; border of the corolla flat;" flower-stalks numerous; corolla sulphur colour, with an orange eye: a rose-coloured variety is found in the Levant, sometimes in England; the common double yellow is very elegant. The varieties with a dark border, under the name of Polyanthus, as cultivated by Florists are innumerable, and some very beautiful. April. Britain. P.

2. P. Elatior. *Great Cowslip, or Oxlip.* "Leaves



toothed, wrinkled; stalk many flowered; border of the corolla flat," pale yellow, smaller than the last: it appears to be a sort of mule between the former and the next species, having the flat border of the first, and the many flowered scape of the other. If this is a distinct species, the *Polyanthus* is rather a variety of it than of *P. Vulgaris*. April. Britain. P.

3. *P. Ve'ris*, by some *Officina'lis*. *Common Cowslip*, or *Paigle*. "Leaves toothed, wrinkled, contracted in the middle; stalk many flowered; border of the corolla concave;" flowers in umbels on unequal foot-stalks, drooping, full yellow, with an orange-coloured blotch at the base of each segment; fragrant. April, May. Britain. P.

4. *P. Farino'sa*. *Bird's-eye Primrose*. "Leaves crenate, smooth, oblong, toothed, powdery underneath; border of the corolla flat;" umbel erect, flat topped; flowers red, small. June. Britain. P.

5. *P. Auricula*. *Auricula*, or *Bea's-ear*. "Leaves serrated, smooth, obovate, more or less powdery, succulent; scape many flowered, about as long as the leaves." In its wild state flowers yellow, purple, or red; scent grateful. The varieties occasioned by culture are infinite: the properties of a fine auricula are, a stem strong and upright; the umbel regular and close, higher than the leaves; the anthers large and bold, filling the tube well; the eye white, smooth, and round; the ground colour surrounding it rich and regular; black, dark purple, or coffee colour; a rich



blue or pink is good, but a glowing scarlet or crimson, well edged with a bright green border is most desirable, but seldom attained. April and May. The Alps. 1597. P.

6. *P. Villo'sa. Hairy or Mountain Primrose.* "Leaves flat, somewhat serrate, fleshy, hairy;" flower-stem an inch high, sustaining one or two flowers; flower equal to the whole stem or leaf, purple, with a pale eye. April. The Higher Alps. 1768. P.

7. *P. Glutino'sa. Clammy Primrose.* "Leaves serratulate, smooth, glutinous; leaflets of the involucre very large;" umbel, with five or seven sessile flowers; leaves odorous, lance-shaped; corolla violet coloured. April. The Higher Alps. 1777. P.

8. *P. Cortusoï'des. Cortusa-leaved Primrose.* "Leaves wrinkled, lobed; stalk long, many flowered;" leaves not mealy, a fine green; flowers purple, handsome. June. Siberia. 1796. P.

9. *P. Longiflo'ra. Long-flowered Primrose.* "Leaves serrate, smooth, powdery beneath; umbel nodding; tube of the corolla very long," resembling *P. Farinosa*, but handsomer; flowers of the umbel fewer, about five; corolla violet coloured, with a white eye. April. The Tyrol. 1790. P.

10. *P. Margina'ta. Silver edged Primrose.* "Leaves inversely egg-shaped, with tooth-like serratures, and a white margin; stalk many flowered; leaflets of the involucre shorter than the foot-stalks;"



corolla lilac, edges of the leaves mealy, so as to give the appearance of a silvery edge; scent musky. March and April. Switzerland. 1777. P.

11. P. *Integrifolia*. *Entire-leaved Primrose*. "Leaves quite entire, elliptic; cartilaginous at the edges; umbel erect; calyx with a long tube, very blunt;" tube of the corolla not contracted at the neck; umbel two or three flowered; border of the corolla, violet. May. Switzerland. 1796. P.

XXV. ANDRO'SACE, from *ανδρως*, of a man, and *σας*, a shield; so called from the shape of the calyx in the first species. Nat. ord. Linn. Preciæ. Juss. *Lysimachiæ*. 10 Species.

1. A. *Maxima*. *Oval-leaved Androsace*. "Calyx of the fruit very large;" leaves ovate, acute, sessile, thickish; umbels terminal, of about seven flowers; corolla white, with a tinge of purple; tube yellowish. May. Austria. 1596. A.

2. A. *Elongata*. *Cluster-flowered Androsace*. "Leaves lanceolate, toothed; pedicles of the umbel, when in fruit, growing very long; corolla shorter than the angular calyx;" flower-stalks numerous; corolla white, tube yellow. May. Austria. 1776. A.

3. A. *Septentrionalis*. *Tooth-leaved Androsace*. "Leaves lanceolate, toothed, smooth; calyx angled, shorter than the corolla;" umbels loose, on long slender pedicles; corolla white. April. Russia. 1773. A.



4. A. Villo'sa. *Hairy Androsace*. "Leaves linear, lanceolate, with a villous margin; calyxes shaggy;" leaves in little roses, pale green; stalk two inches high, rather hairy, supporting an umbel of rather large flowers, about seven in number; tube of the corolla yellow, border white, becoming at length purple. July. Switzerland. 1768. P.

5. A. Lac'tea. *Grass-leaved Androsace*. "Leaves lance-shaped, smooth; umbel many times longer than the involucre; leaves in a rose, shining;" stalks slender, green, smooth, three inches long, ending in a few flowers, sometimes one; tube of the corolla yellow, with glands at the throat, border snowy white. July. Switzerland. 1768. P.

6. A. Car'nea. *Awl-leaved Androsace*. "Leaves awl-shaped, smooth; umbel equalling the involucre;" umbel compact, having from three to seven flowers; corolla flesh-coloured, with yellow glands in the throat. July. Switzerland. 1768. P.

These being low plants, with small flowers, making no great appearance, are rarely cultivated, unless in botanic gardens.

XXVI. ARE'TIA, a name given by Haller, in honour of Aretius, a clergyman of Berne, in the 15th century, who taught botany to Gessner. Nat. ord. *Linn.* Preciæ. *Juss.* Lysimachiæ. 3 Species.

1. A. Helve'tica. *Imbricated Aretia*. "Leaves tiled, flowers nearly sitting;" leaves downy; flowers



terminal, solitary white, with yellow glands; calyx large, rough. July. The Alps. 1775. P.

2. *A. Alpina*. *Linear-leaved Aretia*. "Leaves linear, spreading; flowers peduncled;" peduncles one flowered; corolla a little larger than the calyx, with the five divisions rounded, varying in colour, white, red, or purplish blue. May. The High Alps. 1775. P.

3. *A. Vitaliana*. *Grass-leaved Aretia*. "Leaves linear, recurved; flowers nearly sessile;" the root puts up distant tufts of narrow leaves, forming roses like the sedum; corolla deep yellow, with a long tube; in the opening are five glands. June. Switzerland. 1787. P.

This genus is very nearly allied to the last two; it consists of Alpine creeping plants; the little stems are covered with leaves. All the species require a shady situation, and are preserved in gardens with difficulty.

XXVII. *HOTTO'NIA*, named by Boerhaave, in honour of Peter Hotton, his predecessor in the botanical chair at Leyden. Nat. ord. *Linn. Preciæ. Juss. Lysimachiæ.* 4 Species.

1. *H. Palustris*. *Water Violet, or Featherfoil*. "Stalk bearing many flowers in whorls; leaves in whorls," deeply wing-cleft, or pectinate, growing under water; corolla bluish-coloured; from five to eight segments, and as many stamens. This flower possesses great beauty and elegance, and has much the air of a tropical plant. June. Britain. P.



XXVIII. MENYANTHES, from  $\mu\eta\nu$ , a month, and  $\alpha\nu\theta\omicron\varsigma$ , a flower, because it continues a month in blossom; or from its virtues as an emmenagogue. Nat. ord. *Linn.* Preciæ. *Juss.* Lysimachiæ. 4 Species.

1. *M. Nymphoides*. *Fringed Buck-bean, or Water Lily*. "Leaves heart-shaped, entire, waved; corolla fringed;" a water plant; stems very long; leaves on foot-stalks, opposite, simple, floating; flowers axillary, crowded, expanding at noon; golden. July. Britain. P.

2. *M. Trifoliata*. *Common Buck-bean, or Marsh Trefoil*. "Leaves in threes;" corolla extremely hairy on the upper side; flowers in spikes, flesh-coloured; whole herb bitter: it has been a popular medicine for the rheumatism. July. Britain. P.

XXIX. SPIGELIA, in commemoration of Spigelius, a botanist in the 16th century, at Padua. Nat. ord. *Linn.* Stellatæ. *Juss.* Gentianæ. 2 Species.

1. *S. Marilandica*. *Perennial Worm Grass*. "Stem four cornered, all the leaves opposite;" stem herbaceous, erect; leaves sessile, entire, egg lance-shaped; flowers large, in a terminal spike, ranged on one side of the foot-stalk; scarlet on the outside, orange within. August. North America. 1697. P.

This plant is not common; it has been called Indian Pink. It is very handsome. Its root has been long in repute as an excellent remedy for worms; as has also the



root of another species from the West Indies, the *S. Anthelmia*.

xxx. CONVOLVULUS, *a convolvendo*, rolling round; because it twines round other bodies. Nat. ord. *Linn.* Campanaceæ. *Juss.* Convolvuli. 118 Species.

\* *Stems twining.*

1. *C. Scammo'nia*. *Scammony Bird-weed*. "Leaves arrow-shaped, lopped behind; flower-stalks mostly three-flowered;" floral leaves remote from the flower; root long, fleshy, full of a milky juice; flowers large, purplish, white, or pale yellow. August. The Levant. 1696. P.

2. *C. Sibi'ricus*. *Siberian Bird-weed*. "Leaves heart-shaped, pointed, smooth; flower-stalks two flowered;" stems slightly winged; flowers small, flesh coloured, whitish; floral leaves decurrent, often wanting. August. Siberia. 1779. A.

3. *C. Hederaceus*. *Ivy-leaved Bindweed*. "Leaves entire, heart-shaped, three lobed; corolla undivided; fruit erect; calyx tubercled;" flowers solitary, on short peduncles, blue, with a whitish base. July. East Indies. 1729. A.

4. *C. Nil*. *Azure Bindweed*. "Leaves heart-shaped, three lobed; corolla half five cleft; flower stalks shorter than the leaf stalks;" leaves woolly; peduncles two flowered; corolla deep blue, with pur-



ple rays, whence its name Nil, which means Indigo.  
August. America. 1597. A.

5. *C. Purpureus*. *Purple Bindweed*. "Leaves roundish, heart-shaped, undivided; fruit nodding; flower stalks thickening towards the flower; calyx rough, with dots and hairs;" the stem will rise ten feet high; corolla white, with five spots, and shaded with blue and carmine. There are varieties with flowers purplish white, red, and whitish blue. This species is called *C. Major* by the gardeners. August. America, 1629. A.

6. *C. Panduratus*. *Virginian Bindweed*. "Upper and lower leaves heart shaped, entire; middle leaves panduriform, or violin-shaped; calyx smooth; peduncles slender; from one to three flowered;" corolla large, white, the bottom of a fine purple. June to September. Virginia. 1732. P.

7. *C. Bata'tas*. *Tuberous Rooted Bindweed, or Spanish Potatoes*. "Leaves heart halbert-shaped; five-nerved; stem creeping, bristly, putting forth oblong tuberous roots;" flowers purple, lateral, large, about three together on upright stalks. Both Indies. 1597. Hot Ho. S.

8. *C. Jalapa*. *Jalap Bindweed*. "Stem twining; leaves ovate, somewhat heart-shaped; obtuse, slightly bent back, woolly underneath; peduncles one flowered;" root large, full of a milky juice; corolla reddish on the outside, purple or yellow within; seeds downy. September. South America. 1733. Hot Ho. P.



9. *C. Canarien'sis*. *Canary Bindweed*. "Leaves heart-shaped, downy; stems shrubby, perennial, woolly; peduncles many flowered;" flowers axillary, pale blue, sometimes white. June to August. Canary Isles, 1690. S. Gr. Ho.

10. *C. Althæoides*. *Mallow-leaved Bindweed*. "Leaves heart-shaped, sinuate, silky; peduncles two flowered;" leaves divided into five or seven lobes, but sometimes heart-shaped; corolla reddish, large, very open; whole plant silky, with fine hairs. There is a variety with no silkiness; flowers deeper colour, and larger. June to August. The Levant. 1656. Gr. Ho. P.

\*\* *Stems not twining.*

11. *C. Sículus*. *Small flowered Bindweed*. "Leaves heart egg-shaped; peduncles one flowered; floral leaves, lance-shaped; flowers sessile," small, blueish, axillary; peduncles curved towards the top. June to August. Sicily. 1640. A.

12. *C. Lineatus*. *Dwarf Bindweed*. "Leaves lance-shaped, silky, marked with lines, on foot-stalks; peduncles two flowered; calyxes silky, somewhat leafy;" leaves remote, narrower at the base; flowers in small clusters, close together, sitting, deep rose colour. June. South of Europe. 1714. P.

13. *C. Cneorum*. *Silvery-leaved Bindweed*. "Leaves lanceolate, downy; flowers umbelled; calyxes hairy; leaves numerous, scattered, sessile; flowers white, tinged with a pale red;" stems



shrubby, upright. July. The Levant. 1739. Gr. Ho. S.

14. *C. Cantabrica.* *Flax-leaved Bindweed.* "Leaves linear, lanceolate, acute, silky, stem branched, a little erect; calyx hairy; peduncles two flowered;" corolla flesh or pale rose-coloured, with five broad red lines, hairy on the outside. August. South of Europe. 1743. P.

15. *C. Scoparius.* *Broom Bindweed.* "Leaves linear, somewhat hairy; peduncles about three flowered; calyx silky, ovate, acute; stems shrubby; branches rod-like, about two feet high." It has the habit of broom. Corolla blueish white, hairy on the outside; the wood is white and hard; when scraped smelling like roses. August. Canary Isles. 1768. Gr. Ho. S.

16. *C. Tricolor.* *Three-coloured Bindweed.* "Leaves lanceolate, ovate, smooth, sessile; stem declining, flowers solitary;" of a fine blue, yellowish at the bottom, white in the middle. It is by gardeners frequently called *C. Minus*. June to August. Spain, 1629. A.

Of this extensive genus we have three native species, but which are not admitted into gardens. Many of the species possess cathartic properties. Scammony is the inspissated juice of the root of No. 1. Jalap is the powdered root of No. 8. The tuberous roots of No. 7 were early cultivated, under the name of Spanish Potatoes, or



Skyrrits of Peru, and are the potatoes of our old English writers; they are esteemed sweet and nourishing. The green-house species are elegant shrubs.

XXXI. DATURA, *daturus*, from *do*, to give; its weeds being said to possess corroborative virtues. Nat. ord. Linn. Luridæ. Juss. Solanææ. 7 Species.

1. D. Stramo'num. *Common Thorn Apple*. "Seed vessel thorny, erect, egg-shaped; leaves egg-shaped, smooth," with strong ribs, pointed unequally, sinuate and toothed about the edges; flowers single, stalked, white, fragrant at certain times. July to September. England. A.

2. D. Ta'tula. *Blue Thorn Apple*. "Leaves heart-shaped, toothed; seed vessel thorny;" twice as large as the foregoing plant; stem purplish, with white dots; corolla pale blue; leaves more finely toothed. July. America. 1686. A.

3. D. Fastuo'sa. *Purple Thorn Apple*. "Seed vessel tubercled, nodding, globular; leaves ovate, angular;" stem reddish, with white lines, or dots; leaves on long foot-stalks; flowers sitting, purple without, white within, often double or triple. July to September. East Indies. 1731. Gr. Ho. A.

The remaining species of this genus require the protection of the green-house. D. Stramonium came originally from America, but is now naturalized in many places in England. It is powerfully narcotic. Its inspissated juice has



been used in epileptic and other disorders. The leaves smoked, instead of tobacco, have lately been recommended in asthma.

XXXII. *HYOSCY'AMUS*, from *ovs*, of a hog, and *κναιμος*, a bean; it is said to be poisonous to swine. Nat. ord. *Linn.* Luridæ. *Juss.* Solanææ. 8 Species.

1. *H. Nīger.* *Black, or Common Henbane.* "Leaves stem-clasping, indented; flowers sitting;" plant hairy; very fœtid; corolla yellow, beautifully pencilled with a net work of purple veins. June. Britain. B.

2. *H. Al'bus.* *White Henbane.* "Leaves on foot-stalks, sinuated, obtuse; flowers sitting;" leaves more rounded than in the former, which it much resembles; corolla nearly the same; plant clothed with soft white hairs. August. South of Europe. 1570. A.

3. *H. Reticula'tus.* *Ægyptian Henbane.* "Stem leaves on foot-stalks, sinuated, acute; floral leaves entire; flowers bellying," on short stalks; reddish, with a net-work of purple veins; the plant much resembling *H. Niger.* July. *Ægypt.* 1731. A.

4. *H. Pusil'lus.* *Dwarf Henbane.* "Stem leaves lanceolate, toothed; floral leaves in pairs, entire; calyx furnished with spines;" leaves alternate, on long hairy stalks; calyx ten angled, nearly as long as the corolla; corolla yellow, with a black throat. July. Persia. 1690. A.



5. *H. Physaloïdes*. *Purple flowered Henbane*. "Leaves egg-shaped, entire; calyxes inflated, somewhat globular; leaves alternate, upper ones gradually larger;" flowers in bundles, purple, funnel-shaped, erect. April. Siberia. 1777. P.

6. *H. Scopo'lia*. *Night-shade-leaved Henbane*. "Leaves egg-shaped, entire; calyx inflated, bell-shaped, smooth; stem forked; stalks axillary, single flowered;" flowers pendulous; corolla bell-shaped, dirty purple, like *Atropa Belladonna*. May. Carniola. 1780. P.

7. *H. Au'reus*. *Golden flowered Henbane*. "Leaves on foot-stalks, lobed, toothed, acute; flowers on stalks, fruit pendulous;" flowers at each joint of the stem, bright yellow, with a dark purple base; style long. March to October. The Levant. 1640. S. Gr. Ho.

The first species is narcotic, and is often prescribed to patients with whom laudanum disagrees. The last is highly ornamental to the green-house.

XXXIII. *NICOTIA'NA*, in honour of Jean Nicot, the French ambassador at Lisbon, in the year 1560, who received some of the seed from a Dutchman, which he transmitted to France. Nat. ord. *Linn. Luridæ. Juss. Solanææ*. 7 Species.

1. *N. Ta'bacum*. *Virginian Tobacco*. "Leaves lanceolate, ovate, sessile; decurrent, segment of the corolla acute;" stem six feet high, downy, clammy,



fœtid; flowers panicled, rose-coloured; tube very long; it varies with broad or narrow leaves. August. North America. 1570. A.

2. *N. Rus'tica*. *Common Tobacco*. "Leaves on foot-stalks, egg-shaped, entire; segment of the corolla obtuse;" corolla bell-shaped; stems three feet high; flowers numerous, of a dull yellowish green; plant downy, clammy, fœtid. July to September. North America. 1751. A.

3. *N. Frutico'sa*. *Shrubby Tobacco*. "Leaves lanceolate, tapering at the base, clasping the stem, segments of the corolla entire; stem shrubby," about five feet high, branching; flowers in loose bunches, of a bright purple; of the same form as the first species; a variety with white flowers. July. China. 1699. S. Gr. Ho.

4. *N. Panicula'ta*. *Panicled Tobacco*. "Leaves stalked, heart-shaped, entire; panicles much branched; tube of the corolla long, club-shaped; border very short, with rounded lobes;" flowers yellowish green; stem taller, more slender and branched than *R. Rustica*. July to September. Peru. 1752. A.

5. *N. Glutino'sa*. *Clammy Tobacco*. "Leaves stalked, heart-shaped, acute, entire; flowers in branches, drooping, somewhat ringent; calyx as long as the tube," stalk round, about four feet high; leaves large, very clammy; flowers dull purple. July to September. Peru. 1759. A.

The first is the species which forms so important an ar-



tle in commerce ; its various uses are too well known to need explanation. Its oil is a virulent poison. The second species being hardier, is more common in English gardens than the rest. The name Tobacco, is derived from the Island Tobago.

XXXIV. VERBAS'CUM, supposed to be from *barbascum*, bearded ; the plants being rough and shaggy. Nat. ord. *Linn.* Luridæ. *Juss.* Solanææ. 17 Species.

1. V. Thap'sus. *Great broad-leaved Mullein, or High Taper.* "Leaves running along the stem, woolly on both sides ; stem simple ;" stem three to five feet, erect ; flowers numerous, large, on a spike, bright yellow ; stamens orange-coloured, hairy ; anthers red. August. Britain. B.

2. V. Thapsoi'des. *Bastard Mullein.* "Leaves decurrent ; stem branchy ;" probably a mule between the former and next species ; it has the cream-coloured blossom of V. *Lychnitis* ; but its leaves are decurrent, like the first. August. Britain. B.

3. V. *Lychni'tis.* *White Mullein.* "Leaves wedge-form, oblong, naked above ; stem angular paniced ;" lower leaves stalked, stem leaves sessile, not decurrent ; corolla cream coloured ; filaments yellowish, hairy ; anthers orange. June to August. Britain. B.

4. V. *Phlomo'i'des.* *Southern Woollen Mullein.* "Leaves egg-shaped, woolly on both sides ; lower ones on foot-stalks," upper pointed, clasping the



stem, slightly decurrent; stem solitary, large, ending in a long many flowered clustered spike; flowers large, golden, about five in each cluster; stamens purple, hairy; anthers yellow. July. Italy. 1739. B.

5. V. Ferrugineum. *Rusty Moth Mullein*. "Leaves somewhat hairy, wrinkled; stem leaves nearly sitting, equally crenate; root leaves heart-shaped, oblong, doubly crenate;" flowers in a long loose spike, on short pedicles, of a rusty iron colour. August. South of Europe. 1683. P.

6. V. Nigrum. *Dark Mullein*. "Leaves oblong, heart-shaped, stalked," waved and crenate, slightly downy; spike lax; flowers in bundles, about seven in a set, on pedicles, yellow, with a tint of purplish brown at the mouth; filaments violet, hairy; anthers orange. August. Britain. P.

7. V. Pulverulentum. *Yellow Hoary Mullein*. "Leaves ovate, oblong; slightly serrate; powdered on both sides; stem round, paniced, much branched; flowers very numerous;" golden, filaments hairy; anthers vermillion; leaves sessile, the mealy down easily rubbed off; a stately plant. August. Britain. B.

8. V. Virgatum. *Large flowered Primrose-leaved Mullein*. "Leaves ovate, lanceolate, toothed, sessile; heart-shaped at the base; radical ones downy, somewhat lyrate; stem branched; flowers axillary, on short stalks; partly aggregate;" plant green, not



shaped; calyx shorter than the tube of the blossom; corolla five-cleft;" leaves opposite sessile; flowers rose coloured, sessile, erect from the forks of the stem; whole plant bitter. By some botanists arranged with the Gentians. July. Britain. A.

XXXVII. PHLO'X; the word means flame, and is the name of a plant in Theophrastus; this genus was called lychnidea, from its resemblance to lychnis, meaning a lamp; which gave the idea to Linnæus of thus appropriating the Greek name, not approving of the former. Nat. ord. *Linn.* Rosacæ. *Juss.* Polemonia. 18 Species.

1. *P. Panicula'ta.* *Great Panicked Phlox, or Lychnidea.* "Leaves lance-shaped, flat, margin rugged, stem polished; flowers in a corymbus, panicled; segments of the corolla round;" stem three or four feet high, crowded with numerous blossoms of a lilac hue, without scent. August. North America. 1732. P.

2. *P. Undula'ta.* *Wave-leaved Phlox.* "Leaves oblong, lance-shaped, somewhat waved; margin rugged; stem polished;" flowers in a corymbus, panicled; segments of the corolla indented, somewhat retuse; flowers blue. August. North America. 1759. P.

3. *P. Suave'olens.* *White-flowered Phlox.* "Leaves egg lance-shaped, smooth on both sides; stem smooth; cluster panicled;" flowers larger than the



first species; fewer, moderately sweet scented. August. North America. 1766. P.

4. *P. Macula'ta. Spotted stalked Phlox.* "Leaves oblong, lance-shaped, smooth; stem rugged; flower branches opposite, in a corymbus;" stalks purplish, spotted with white spots; central flower-stalk spiked; corolla violet. August. North America. 1759. P.

5. *P. Caroli'na. Carolina Phlox.* "Leaves lance-shaped, polished; stem rugged; corymbus level at top;" leaves sessile, reflex at the edges; calyx short; tube of the corolla long, cut at top into five roundish segments; corolla deep purple. July to September. Carolina. 1728. P.

6. *P. Pilo'sa. Hairy-leaved Phlox.* "Leaves lanceolate, hairy, stem upright; corymbus terminating;" stalks about a foot high; flowers light purple. June. North America. 1759. P.

7. *P. Glaber'rima. Smooth-leaved Phlox.* Leaves linear, lanceolate, smooth; stem upright; corymbus terminal;" stalks about a foot and a half high, divided into three or four branches, each terminated by a corymbus of light purple flowers. June to August. North America. 1731. P.

8. *P. Divarica'ta. Early flowering Phlox.* "Leaves broadly lanceolate, uppermost alternate; stem divided; flower-stalks in pairs;" stem about a foot high, roughish; flowers of a brilliant greyish blue; buds violet. May. North America. 1746. P.

9. *P. Ova'ta. Ovate-leaved Phlox.* "Leaves egg-



shaped," acute, somewhat fleshy; corymbus level at top; corolla large, of a fine purple; pale outside. July. North America. 1759. P.

10. *P. Subula'ta.* *Awl-shaped leaved Phlox.* "Leaves awl-shaped, hairy; flowers opposite;" stems trailing, young shoots of a reddish hue; leaves turning brown, producing other leaves in their axils; flowers about four, in an umbel, flesh coloured, with a dark purple eye. May. Virginia. 1786. P.

There is a variety with linear leaves, under the name of *P. Sibirica*.

11. *P. Seta'cea.* *Bristle-leaved Phlox.* "Leaves bristle-shaped, smooth; flower-stalks elongated; flowers solitary;" stems requiring support, clothed with numerous leaves; corolla light purple, with a dark eye; segments jagged. May. North America. 1786. P.

12. *P. Pyramida'lis.* *Pyramidal Phlox.* "Leaves ovate, or heart-shaped, pointed, smooth; stem rough; flowers in a dense pyramidal cluster;" stem spotted with purple; corolla rich purple, of a honey scent. August. North America. 1799. P.

13. *P. Stolonifera.* *Creeping Phlox.* "Runners creeping; leaves obovate, somewhat spoon-shaped;" trailing runners throwing out shoots in all directions; stem a span high, bearing a panicle of deep blue flowers, with orange anthers. June to September. North America. 1790. P.

- This is a handsome tribe of American plants, all tole-



rably hardy, and valuable for their copious flowers, affording ornament either in pots or borders—they require much water.

xxxviii. POLEMONIUM, from πολέμος, war, because, says Pliny, kings had contended for the honour of its discovery. Nat. ord. *Linn.* Campanaceæ. *Juss.* Polemonia. 5 Species.

1. *P. Cœruleum.* *Common Greek Valerian, or Jacob's ladder.* “Leaves pinnate, with numerous leaflets; flowers erect;” herb smooth, two feet high, paniced and leafy; flowers terminal, numerous, purplish blue, varying to white. May to July. Rarely native in Britain. Mountains of Europe. *P.*

2. *Rep'tans.* *Creeping Greek Valerian.* “Leaves pinnate, with about seven pair of wings; flowers drooping;” root creeping; corolla a light blue, varying to white; smaller and less beautiful than the former species. May. North America. 1758. *P.*

Why the English name was applied to these plants, it is not easy to guess, as they are not known in Greece, and bear no sort of resemblance to Valerian, in appearance or qualities, except in having pinnate leaves.

xxxix. IPOMŒA, so called by Linnaeus, from  $\psi$ , which, by a mistake, he supposed to be the Convolvulus; whereas it means a sort of worm, and ομοιος, like; the genus resembling Convolvulus. Nat. ord. *Linn.* Campanaceæ. *Juss.* Convolvuli. 28 Species.



1. I. Qua'moclit. *Wing-leaved Ipomæa*. "Leaves wing-cleft; sections linear; flowers nearly solitary;" stems slender, twining; flowers on pedicles, of a most beautiful scarlet colour. July. East Indies. 1629. A. Hot Ho.

2. I. Cocci'nea. *Scarlet flowered Ipomæa*. "Leaves heart-shaped, pointed, angular at the base; peduncles many flowered;" stem twining; flowers long, scarlet, varying to orange; anthers white. June to September. West Indies. 1759. A.

3. I. Lacuno'sa. *Starry Ipomæa*. "Leaves heart-shaped, pointed, pitted on the surface; angular at the base; stalks mostly one-flowered, sometimes two; shorter than the flower;" stems trailing; flowers white, the edges tinged with purple. July. Carolina. 1640. A.

4. I. Trilo'ba. *Three lobed Ipomæa*. "Leaves three lobed, heart-shaped; peduncles mostly three flowered;" stem twining angular; corolla cylindric, violet coloured. July. West Indies. 1759. A.

5. I. Hederifo'lia. *Ivy-leaved Ipomæa*. "Leaves three lobed, heart-shaped; peduncles many flowered, in racemes, or bunches;" the corolla of this is four times as long as in the last species. July. South America. 1773. A.

6. I. Tamnifo'lia. *Black Bryony-leaved Ipomæa*. "Leaves heart-shaped, pointed, hairy; flowers aggregate," closely heaped together, small, short, blue, soon withering. July. Carolina. 1732. A.



XL. AZA'LEA, αζαλεος, dry, from its loving a dry soil. Nat. ord. *Linn.* Bicornes. *Juss.* Rhododendra. 6 Species.

1. A. Pon'tica. *Yellow Azalea*. "Leaves shining; lanceolate, smooth on both sides; racemes terminal." This shrub much resembles *Rhododendron Ponticum*; flowers yellow. May. Turkey. 1793. S.

2. A. Nudifl'ra. *Downy flowered Azalea*. "Leaves egg-shaped, smooth; corolla hairy; stamens very long;" foot-stalks axillary, long, and naked, supporting a cluster of flowers, which appear before the leaves; stems in its native country fourteen feet high, in England not exceeding half that height; corolla originally of a deep red; it varies to scarlet, pale red, white, pink with lower segment white; red tube with a white border. May and June. North America. 1734. S.

3. A. Visco'sa. *Clammy Azalea*. "Leaves with rough margins; corolla hairy, clammy;" stems about four feet high; leaves spear-shaped, in clusters; flowers in clusters between the leaves, appearing at the same time, white, with a mixture of yellow on the outside. This likewise has its varieties, the corolla sometimes with pale red keels; leaves of a deeper or pale green, smooth, or glaucous. July. North America. 1734. S.

These shrubs are highly beautiful and ornamental—the latter somewhat resembles the Honey-suckle, and is agreeably scented. We have a little mountainous native



species, difficult to preserve, and rarely, if ever, seen in gardens.

**XLI. NER'IUM.** This name is mentioned by Pliny and Dioscorides, but its meaning is altogether uncertain. Nat. ord. *Linn.* Contortæ. *Juss.* Apocinææ. 8 Species.

1. *N. Olean'der.* *Common Rose Bay, or Oleander.* "Leaves linear, lanceolate, in threes, ribbed underneath; segments of the calyx prominent; nectaries flat;" stem much branched; flowers large, numerous, terminal, in a corymbus, inodorous, rose coloured, occasionally white, sometimes double; a beautiful evergreen shrub. July to October. The Levant. 1596. E. S. Gr. Ho.

**XLII. AMSONIA,** from the name of some person unknown; perhaps Lord Anson, the famous navigator, though with the mistake of a letter. Nat. ord. *Linn.* Contortæ. *Juss.* Apocinææ. 3 Species.

1. *A. Latifo'lia.* *Broad-leaved Amsonia.* "Leaves alternate, egg-shaped; stem herbaceous, smooth," a foot high, leafy; flowers in a panicle, greyish blue, scentless; corolla hairy about the mouth, tube pale. June. Carolina. 1759. P.

2. *A. Angustifo'lia.* *Narrow-leaved Amsonia.* "Leaves linear, erect, fringed, scattered; stem herbaceous, hairy;" flowers as in the last; tube a little tawny. May. Carolina. 1774. P.



These plants have been removed by later botanists from the genus *Tabernæmontana* in Linnæus; they are somewhat tender, but their leaves being always green, they make a pleasing diversity amongst other flowers. They are somewhat rare.

XLIII. VIN'CA, originally *pervinca*, from *vincio*, to bind; because with its runners it binds or entangles other plants. Nat. ord. *Linn.* Contortæ. *Juss.* Apocineæ. 5 Species.

1. V. Ma'jor. *Greater Periwinkle*. "Stem erect; leaves egg-shaped, fringed at the edge; flowers stalked;" leaves three inches long, two wide, evergreen; flowers large, blue, with a whitish mouth; the stems not bearing flowers, creeping. May to July. Britain. E. S.

2. V. Mi'nor. *Less Periwinkle*. "Stems trailing; leaves lance egg-shaped, smooth at the edge;" leaves evergreen, sometimes variegated; flowers stalked; axillary solitary, blue, with a white eye; darker and smaller than in the former species. May to July. Britain. E. S.

3. V. Ro'sea. *Madagascar Periwinkle*. "Stem shrubby, erect; flowers sessile, in pairs; leaves elliptic, oblong, downy;" corolla large, beautiful bright rose colour, or pure white; the centre of a rich crimson, with a yellowish eye. June to October. Madagascar. 1759. E. S. Gr. Ho.



XLIV. CAP'SICUM, doubtful whether derived from *καπτω*, to bite; on account of the biting heat of the seed vessel; or from *capsa*, a chest, in allusion to its form. Nat. ord. *Linn.* Luridæ. *Juss.* Solaneæ. 6 Species.

1. *C. An'nuum.* *Annual Capsicum, or Guinea Pepper.* "Stem herbaceous; peduncles solitary, fruit oblong;" leaves egg-shaped, on foot-stalks; flowers white, lateral; fruit smooth and shining, variable in form and colour, sometimes long, straight, acute; at other times short, thick, obtuse; red, orange, and yellow. August. Both Indies. 1596. A.

2. *C. Cerasifor'me.* *Cherry Pepper Capsicum.* "Stem nearly shrubby; fruit nearly globular, solitary, erect;" leaves scattered, lanceolate; flowers yellowish white, on long stalks; fruit about the size of a cherry, red or yellow. July. Brazil. 1759. A.

The other species of *Capsicum* are shrubby, and require the constant protection of a stove. In England they are cultivated chiefly for ornament: they all possess the same acrimonious qualities, and have been long known as a poignant ingredient in high flavoured dishes. *C. Grossum*, or Bell Pepper, is the most proper for pickling. The capsules of *C. Baccatum*, or Bird Pepper, pounded and mixed with flour, which is then baked and afterwards reduced to a powder, afford the well-known Cayenne Pepper.

XLV. SOLA'NUM, of uncertain derivation: perhaps



from *solari*, to assauge, its expressed juice relieving pain as a narcotic. Nat. ord. *Linn.* *Luridæ.* *Juss.* *Solanææ.* 83 Species.

1. *S. Pseudocapsicum.* *Shrubby Night Shade, or Winter Cherry.* "Stem shrubby, unarmed; leaves lanceolate, wavy, smooth, ever-green; umbels lateral, sessile;" flowers few together, drooping, white with orange anthers; fruit scarlet, the size of a cherry. June to September. Madeira. 1596. E. S. Gr. Ho.

2. *S. Quercifolium.* *Oak-leaved Nightshade.* "Stem somewhat herbaceous, angular, zigzag, unarmed; leaves winged, clusters cymose;" flowers drooping, violet. July. Chili. 1787. P.

3. *S. Tuberosum.* *Tuberous-rooted Nightshade, or Common Potatoe.* "Stem unarmed, herbaceous; leaves interruptedly pinnate, entire; flower-stalks subdivided;" flowers panicle, large, purplish or white, drooping, handsome. July. Peru. 1597. A.

4. *S. Lycopersicum.* *Tomato, or Love Apple.* "Stem unarmed, herbaceous; leaves interruptedly pinnate, cut, clusters deeply divided, leafless; fruit smooth;" flowers yellow, in large bunches; fruit shining, pendulous, compressed at top and bottom, furrowed. July to September. South America. 1596. A.

5. *S. Melongena.* *Egg-plant Nightshade, or Mad Apple.* "Stem herbaceous, unarmed; leaves ovate, wavy, downy; fruit-stalks drooping, swelling; calyx unarmed;" flowers large, purplish, lateral, axillary; fruit white, resembling a large egg, sometimes



tinged with violet. July. Asia, Africa. 1597. A. Gr. Ho.

6. *S. Dulcamara*. *Woody Nightshade, or Bitter Sweet*. "Stem shrubby, twining; upper leaves halbert-shaped; clusters cymose, drooping, opposite to the leaves;" flowers violet coloured, with two green dots at the base of each segment; berries scarlet. June, July. Britain. S.

Var. 1. *African Woody Nightshade*, leaves thick and woolly.

7. *S. Nigrum*. *Common or Garden Nightshade*. "Stem herbaceous, erect; leaves egg-shaped, with tooth-like angles; umbels lateral, drooping," composed of numerous small white flowers; berries black, occasionally yellow; several varieties have been enumerated, arising from the stem being more or less angular, crisped or toothed, and the herbage more or less smooth or hairy. July. Britain. A.

Of this numerous genus, the first species under the name of *Amomum Plinii*, has been long a favourite of the green-house. Nos. 4 and 5, are cultivated in the South of Europe, for the sake of the fruit, which imparts an agreeable acid flavour to soups and sauces. The two English species are well known for their black and red shining berries, which have proved poisonous to children. The rest of the species are chiefly natives of America, amongst which is the *S. Tuberosum*, or *Potatoe*, concerning the introduction of which into England some uncertainty has prevailed; the most probable opinion is, that some of Sir Walter Raleigh's captains, returning from the expedition



to Virginia, in 1584, touched at Cork, and left there this root, which was first cultivated on Sir Walter's estate, at Youghall, in that neighbourhood; it was called the Virginia Potatoe, to distinguish it from the *Convolvulus Batatas* or Spanish Potatoe, at that time in frequent use.

It soon passed from Ireland to Lancashire, where it attracted much notice; but though some specimens were raised by Gerarde, and perhaps others near London: it was considered chiefly as a curiosity, nor was it till forty years afterwards that it became at all common. This useful and nutritious root, like all other plants much cultivated, has numerous varieties.

XLVI. *PHY'SALIS*, from *φύσα*, an inflated bladder, the calyx being much swollen. Nat. ord. *Linn.* *Luridæ.* *Juss.* *Solanææ.* 17 Species.

1. *P. Somnifera.* *Clustered Winter Cherry.* "Stem shrubby; branches straight; flowers crowded;" leaves ovate; flowers small, pale yellow; fruit scarlet, the size of a currant, concealed by the green downy calyx. August. Mexico. 1596. *S. Gr. Ho.*

2. *P. Pensylvanica.* *Pennsylvanian Winter Cherry.* "Leaves egg-shaped, somewhat scalloped, obtuse, almost naked; flowers in pairs; stem herbaceous;" corolla yellow, darker at the bottom; berry red, the size of a pea. July to September. North America. 1726. *P.*

3. *P. Alkeken'gi.* *Common Winter Cherry.* "Leaves in pairs, pointed; stem herbaceous, some-



what branched at the base ;" root creeping ; corolla white ; calyx large, orange-coloured, permanent, enclosing a berry of the same colour. July to September. South of Europe. 1597. P.

4. *P. Angulata*. *Tooth-leaved Winter Cherry*. "Stem much branched ; branches angular, smooth ; leaves egg-shaped, toothed" like those of common Goose-foot ; flowers pale yellow, with spots of darker yellow at the base ; stamens short, purple ; calyx green, frequently streaked with purple at the angles ; berry small, green when ripe. June to September. Both Indies. 1732. A.

5. *P. Pruinosâ*. *Hairy Annual Winter Cherry*. "Stem very much branched ; leaves downy ; fruit-stalks stiff and straight ;" branches flat above, and woolly ; flowers drooping, pale ; anthers yellow ; calyx with a flat base ; berry top-shaped. July. North America. 1726. A.

The fruit of these plants is in some instances eatable, and grateful for its acidity in warm climates. The flowers are not particularly beautiful. What is most remarkable is the singularity of the large inflated bladdery calyx.

XLVII. *A'TROPA*, from *Atropos*, the third fate, who was supposed to cut the thread of life. Nat. ord. *Linn. Luridæ. Juss. Solanææ.* 7 Species.

1. *A. Mandragora*. *Mandrake*. "Stemless ; stalks one-flowered ;" root large, tapering, three or four feet long, crowned by a circle of large, ovate,



sinuate leaves; flowers greenish white; berry yellowish green, the size of a nutmeg. April. The Levant. 1562. P.

2. A. Belladonna. *Dwale, or Deadly Nightshade*. "Stem herbaceous; leaves egg-shaped, entire;" peduncles lateral, solitary, one-flowered, nodding; flowers of a dirty violet colour; anthers white; berry when ripe juicy, sweet, of a shining dark purple. July. Britain. P.

3. A. Physaloïdes. *Blue-flowered Atropa*. "Stem herbaceous; leaves sinuate, angular; calyxes closed, acute, angular;" leaves alternate, smooth; corolla slightly five-lobed, blue with a white eye, having five blue spots; berry the size of a cherry, involved in the calyx. July to September. Peru. 1759. A.

The plants of this genus have been long noted for their dangerous qualities, yet they have been introduced into the practice of medicine with considerable success. The absurd stories related of the roots of the Mandrake need only be heard to be confuted. The Mandrakes spoken of in the Scripture are clearly not a species of *Atropa*, but probably a sort of Gourd. Of the fatal effects of the berries of the Deadly Nightshade but too many instances have occurred.

XLVIII. ELLISIA, named by Linnæus in honour of John Ellis, F.R.S. author of several botanical discoveries, died 1776. Nat. ord. *Linn. Asperifoliæ. Juss. Boragineæ.* 1 Species.



1. *E. Nycte'lea*. *Cut-leaved Ellisia*. Stem decumbent, branched; leaves alternate, stalked, wing-cleft, roughish; flowers small, pale blue, on solitary stalks; a somewhat tender plant. July. Virginia. 1755. A.

XLIX. LY'CIIUM, from Lycia, its native country. Nat. ord. *Linn.* Luridæ. *Juss.* Solanææ. 11 Species.

1. *L. Barbarum*. *Willow-leaved Box Thorn*. "Leaves oblong lance-shaped, solitary or clustered, very unequal; spines axillary; branches long, pendulous;" flowers purple; berries orange red; calyx three or five-cleft: a rambling shrub cultivated for bowers and trellises. The Chinese variety with the style longer than the stamens; when first introduced was thought to be the Tea-plant. May to August. Asia. 1709. S.

2. *L. Ruthe'nicum*. *Tartarian Box Thorn*. "Leaves linear, clustered, from spinous buds;" branches slender, pendulous, compound; flowers drooping, pale purple. This plant is smaller in all its parts than the preceding. July. Siberia. 1804. S.

3. *L. Europæ'um*. *European Box Thorn*. "Leaves obovate, oblique, clustered; spines lateral and terminal; stem erect;" branches firm, upright; corolla paler, longer, and more slender than in *L. Barbarum*; nor is there, as in that, a prominent green line running



down the branches from each bud. May to August.  
South of Europe. 1700. S.

L. SIDEROX'YLON, from σιδῆρος, iron, and ξύλον, wood, alluding to its hardness. Nat. ord. Linn. Dumosæ. Juss. Sapotæ. 9 Species.

1. S. Lycioi'des. *Willow-leaved Iron-wood*.  
"Thorny; leaves deciduous, lance-shaped;" a small tree with minute greenish flowers; flower-stalks axillary, several together; corolla twice the length of the calyx. The wood sinks in water. August. North America. 1758. S.

LI. SA'MOLUS, diminutive of *Samos*, an island of Greece, in which it grows abundantly. Nat. ord. Linn. Preciæ. Juss. Lysimachiæ. 1 Species.

1. S. Valeran'di. *Brook-weed, Water Pimpernel*.  
Leaves oblong, obtuse; clusters in a corymbus: a smooth, pale, somewhat succulent herb, with copious small white inodorous flowers. June to August. Native of the four quarters of the Globe, and in Britain. P.

LII. PHYTEU'MA, from φύτεω, to sow or plant. Why the name is applied to this genus is not very evident. Nat. ord. Linn. and Juss. Campanacæ. 16 Species.

1. P. Hemisphæ'rica. *Grass-leaved Rampion*.  
"Head roundish; leaves linear, very entire, about as



long as the stem; floral-leaves ovate, pointed;" stems from two to six inches high; flowers blue. July. Switzerland. 1752. P.

2. *P. Como'sa. Tufted Rampion.* "Flowers in a terminal leafy tuft; leaves strongly toothed, smooth, glaucous; radical leaves heart-shaped;" herbage glaucous; flowers purple, inflated, beautiful. June. Italy. 1752. P.

3. *P. Orbicula'ris. Round-headed Rampion.* "Head roundish; leaves crenate, the lowest somewhat heart-shaped, upper sessile, pointed, ovate;" stem about a foot high, crowned with a dense head of dark blue flowers. July. Britain. P.

4. *P. Spica'ta. Spiked Rampion.* "Spike oblong; styles somewhat hairy, three-cleft; root-leaves heart-shaped, doubly toothed;" stem upright, angular, smooth; upper leaves linear, lanceolate; flowers sessile, blue, varying to a yellowish white. June. Germany. 1683. P.

5. *P. Pinna'ta. Wing-leaved Rampion.* "Leaves pinnate; panicle cylindrical, many flowered, branched;" root thick, milky; first leaves heart-shaped; flowers abundant, of a lilac hue, as are also the stamens and style. July. Isle of Candia. 1640. P. Gr. Ho.

This genus is nearly allied to *Campanula*, but differs in the shape of the corolla: all the species when wounded produce a milky juice. *P. Pinnata* is a beautiful ornament to the green-house: its root is sometimes eaten.



LIII. TRACHELIUM, from τραχηλος, the neck, in allusion to the long throat of the corolla. Nat. ord. *Linn.* and *Juss.* Campanaceæ. 3 Species.

1. T. Cæruleum. *Blue Throatwort*. "Leaves ovate, serrate; corymbus compound; stems branched, erect;" herbage smooth, dark green; flowers numerous, of a fine blue; growing on old walls and ruins. July to September. Italy. 1739. B.

LIV. CAMPANULA, from the Latin a little bell. Nat. ord. *Linn.* and *Juss.* Campanaceæ. 85 Species.

\* *Leaves somewhat glossy and narrow.*

1. C. Cenisia. *Fringed Bell Flower*. "Stem one-flowered; leaves egg-shaped, smooth, entire, somewhat ciliated or fringed;" stems simple, weak, about two inches high; flower blue, terminal, large in proportion to the size of the plant; calyx rough, a little hairy. July. Mount Cenis. 1775. P.

2. C. Pul'a. *Russet Bell Flower*. "Stem one-flowered; stem-leaves egg-shaped, crenate, pedicled; flower drooping;" corolla deep blue, terminal; calyx smooth; stem five or six inches high. July. Austria. 1779. P.

3. C. Grandiflora. *Great-flowered Bell Flower*. "Leaves oblong, serrate, nearly sessile, sometimes in threes; stems one-flowered; flower expanding;" stems a foot high, feeble, simple, few; flowers large, of a beautiful blue, before expansion green and pear-



shaped, resembling an air balloon. July. Siberia. 1782. P.

4. *C. Verticillata. Whorl-leaved Bell Flower.* "Leaves five or six in a whorl, lanceolate, serrate; flowers in whorls;" stems numerous, a foot high; flowers blue, on the upper part of the stem above the whorls of leaves; drooping on short peduncles. June. Siberia. 1783. P.

5. *C. Rotundifolia. Round-leaved Bell Flower, or Heath Bells.* "Root-leaves kidney-shaped; stem-leaves linear;" stems from three inches to a foot in height, rather upright but weak; flowers blue, sometimes white, nodding; the juice stains blue; root-leaves usually hidden in the surrounding herbage; the plant varies from soil and situation. June to September. Britain. P.

The *C. Pumila* of some authors is perhaps a variety of this species.

6. *C. Carpathica. Carpatian Bell Flower.* "Leaves heart-shaped, serrated, smooth, stalked; flower-stalks long; calyx reflected, glutinous;" stem much branched, many flowered; flowers blue, large, and strong. July. Carpatian Alps. 1774. P.

7. *C. Lobelioides. Small-flowered Bell Flower.* "Stems small, round, stiff, smooth; leaves linear, lance-shaped, toothed, sessile; corollas funnel-shaped, three and four cleft;" flowers very small, pale purple; in general habit and tenderness it resembles a *Lobelia*. July, August. Madeira. 1777. A.



8. *C. Pa'tula. Spreading Bell Flower.* "Leaves stiff and straight, sessile; root-leaves lance-oval, stalked; panicle spreading; calyx toothed;" stem a foot and a half high; flowers upright, tapering at the base, light blue. July, August. Britain. B.

9. *C. Rapun'culus. Esculent Bell Flower, or Rampion.* "Leaves waved; root-leaves lance-oval; panicle contracted;" root white, sweet, spindle-shaped; stem nearly two feet high, angular, rough; leaves sessile, alternate, toothed; flowers upright; corolla blueish, purple, or whitish; whole plant full of a milky juice. July to September. England. B.

10. *C. Persicifo'lia. Peach-leaved Bell Flower.* "Root-leaves inversely egg-shaped; stem-leaves lanceolate, linear, somewhat serrate, sessile, remote; stem two or three feet high, smooth; flowers in a thin spike, blue, sometimes white, on long stalks;" corolla large, broad, short. A variety with double flowers. July to September. North of Europe. 1596. P.

11. *C. Pyramida'lis. Pyramidal Bell Flower.* "Leaves smooth, even, serrated, heart-shaped; stem-leaves lanceolate; stems rush-like, simple; umbels sessile, lateral;" stems several, four feet high, smooth; flowers blue, sometimes white, large, open, on short stalks coming out several together in lateral and terminal tufts. July to October. Carniola. 1596. P.

12. *C. America'na. American Bell Flower.* "Leaves heart-shaped, lanceolate, serrated; foot-stalks of the lower leaves fringed; flowers axillary, sessile; corolla



five-cleft, flat; style longer than the corolla;" flowers three or four from each axil, blueish. July. Pennsylvania. 1763. A.

13. *C. Nitida*. *Smooth-leaved Bell Flower*. "Leaves oblong, crenate, smooth, glossy; stem-leaves lance-shaped, nearly entire; corolla bell-wheel-shaped;" flowers blue or white, one or two in each axil of the upper leaves; calyx short. It is doubtful whether this be specifically different from the preceding. July. North America. 1743. P.

14. *C. Lilifolia*. *Lily Bell Flower*. "Leaves lanceolate; stem-leaves sharply ovate; flowers panicled, nodding;" the stem, before it produces the panicle, puts out leaves in a kind of rose, which are afterwards dispersed about its stem. This plant varies in the size and colour of the flower, and in smoothness and roughness. May to September. Siberia. 1784. P.

15. *C. Rhomboidea*. *Germander-leaved Bell Flower*. "Leaves rhomboid, serrate; spike pointing one way; segments of the calyx toothed;" stems from six to sixteen inches high; leaves sessile, scattered; flowers blue, in a short loose spike. July. Alps of Switzerland. 1775. P.

\*\* *Leaves rugged, and rather broad.*

16. *C. Latifolia*. *Broad-leaved or Giant Bell Flower*. "Leaves egg lance-shaped, large; stem simple, nearly round; flowers solitary, peduncled; calyx smooth; fruit drooping;" stem three or four



feet high, somewhat hispid; flowers large, blue, sometimes white, axillary, erect. July. Britain. P.

17. *C. Rapunculoïdes*. *Creeping Bell Flower*. "Leaves heart lance-shaped; stem branched; flowers scattered, pointing one way, nodding; calyx reflected;" root creeping; stem a foot high, rough; flowers blue, axillary. July. Britain. P.

18. *C. Bononiensis*. *Bologna, or Panicked Bell Flower*. "Leaves egg lance-shaped, rough beneath, sessile; stem panicked, three feet high, erect, rough;" flowers violet coloured, terminating; the branches in a kind of spike; lower flowers three together, stalked, upper ones single, sessile. August. Italy. 1778. P.

19. *C. Trachelium*. *Nettle-leaved Bell Flower, or Canterbury Bells*. "Stem angular; leaves lance heart-shaped, stalked, acutely serrated; calyx hispid; flower-stalks axillary, few flowered;" stem two or three feet high; flowers violet-coloured, usually three on a pedicle. July. Britain. P.

20. *C. Glomerata*. *Clustered Bell Flower, or Little Canterbury Bells*. "Stem angular, simple; flowers sessile, collected into a head, a few solitary and axillary within the upper leaves; leaves egg-shaped, crenate;" stem a foot high; leaves hairy, pale underneath; flowers blue, purple, or white. May to September. Britain. P.

21. *C. Cervicaria*. *Wave-leaved Bell Flower*. "Hispid; flowers sessile, in terminal heads; leaves lanceolate, linear, waved, crenate; stem a foot high;



leaves rough ; flowers blue or white. July. Germany. 1783. B.

22. C. Thyrsoidæa. *Long-spiked Bell Flower*. "Hispid ; raceme egg-oblong, terminal ; stem simple, leaves lanceolate, linear ;" stem eight or ten inches high, erect, rough ; flowers yellowish white, numerous, densely disposed in a long egg-shaped terminating spike ; corolla hairy. July. Germany. 1785. B.

\*\*\* *Capsules covered by the reflected segments of the calyx.*

23. C. Me'dium. *Coventry or Canterbury Bells*. "Capsule five-celled ; stem upright ; flowers upright ; stem two feet high, round, furrowed, hairy ; root-leaves stalked ; stem-leaves sessile ;" flowers blue, purple, or white, large ; capsule covered by the reflected segments of the calyx. June to September. Germany. 1597. B.

24. C. Barba'ta. *Bearded or one-leaved Bell Flower*. "Capsules five-celled ; stem few flowered, mostly one leaved ; leaves lanceolate ; corolla bearded ;" stem from six to eighteen inches high ; flowers blue or white, drooping, pointing one way, smooth without, bearded within, with long white hairs. June, July. Switzerland. 1775. P.

25. C. Spica'ta. *Spiked Bell Flower*. "Hispid ; spike loose ; flowers alternate ; leaves linear, entire ;" the whole plant hairy ; stem four or five feet high ; stem-leaves clasping the stem ; flowers blue, sessile,



axillary, forming a long spike. July. Switzerland. 1786. B.

26. *C. Saxa'tilis*. *Rock Bell Flower*. "Capsules five-keeled; flowers alternate, nodding; leaves inversely egg-shaped, crenate;" stems from four to twelve inches high; root-leaves spoon-shaped, rather fleshy; flowers blue, hairy within, large. May to August. Isle of Crete. 1768. P. Gr. Ho.

27. *C. Sibi'rica*. *Siberian Bell Flower*. "Capsule three-celled; stem paniced," a foot high, angular, slightly hairy; leaves oblong, half embracing the stem, rough; flowers oblong, small, blue; peduncles often three flowered; calyx hispid. July to September. Siberia. 1783. B.

28. *C. Spe'culum*. *Venus's Looking Glass*. "Stem much branched, diffuse; leaves oblong, somewhat crenate; flowers solitary; capsules prism form;" stem six to ten inches high; leaves small, sessile; flowers purple violet, folding up in the evening to a pentagonal figure; corolla wheel-shaped, deeply five-cleft. The English name is derived from the shining smoothness of the seeds. May to July. South of Europe. 1683. A.

*C. Hybrida*, a native species, is perhaps a variety of this, as is also the *C. Pentagonia* of Ray.

29. *C. Perfolia'ta*. *Perfoliate Bell Flower*. "Stem simple; leaves stem-clasping, heart-shaped, toothed; flowers sitting, toothed;" stem six to eighteen inches high, upright, angular, woolly; flowers small, blue,



axillary. three together. June. North America. 1680. A.

30. *C. Hedera'cea.* *Ivy-leaved Bell Flower.* "Leaves heart-shaped, five lobed; leaf-stalks smooth; stem weak," procumbent, wide spreading; peduncles long, solitary; whole herb tender, delicate; corolla pale blue, oblong, slender. May to August. Britain. P.

31. *C. Eri'nus.* *Forked Bell Flower.* "Stem forked; leaves sessile, upper ones opposite, three toothed;" stem six inches high; flowers small, pale blue; whole plant woolly, it has the air of a *Veronica*. July, August. South of Europe. 1768. A.

Of this very extensive genus, most of the species above enumerated are extremely beautiful, *C. Pyramidalis*, when trained upon a frame of laths is highly ornamental in halls or fire-places in the summer: the roots of several are esculent, particularly Nos. 10 and 21. *C. Rapunculus*, or *Rampion*, was formerly much cultivated for the sake both of its roots and leaves as a salad; its roots were also eaten boiled. It is in much request with the Swiss, but now in England has become generally neglected.

LV. *LOBELIA*, in honour of Lobel, a Fleming, Physician to James the First. Nat. ord. *Lin.* and *Juss.* *Campanacæ.* 48 Species.

1. *L. Dortman'na.* *Water Lobelia, or Gladiole.* "Leaves linear, entire, of two parallel cells; stem nearly naked;" herb smooth, milky when wounded;



stem erect, bearing a loose cluster of pendulous blue flowers. July. Lakes in North Britain. P.

2. *L. Cardinalis*. *Scarlet Lobelia, or Cardinal Flower*. "Leaves lanceolate, broad, serrate; spike terminal, pointing one way;" stem erect, three feet high, leafy; flowers of a vivid scarlet. July to October. Virginia. 1629. P.

3. *L. Siphilitica*. *Blue Lobelia, or Cardinal Flower*. "Stem erect; leaves lance egg-shaped, somewhat serrate, edge of the calyx reflected;" stem two feet high, strong, angular; flowers solitary, on stalks, forming a long spike; corolla blue, varying in shade from violet to light blue. September. Virginia. 1665. P.

4. *L. Inflata*. *Bladder-podded Lobelia*. "Stem erect; leaves egg-shaped, somewhat serrate, longer than the foot-stalks; capsules inflated;" stems hairy, two feet high; flowers small, on slender stalks, forming a loose spike, light blue. July. North America. 1759. A.

5. *L. Cliffortiana*. *Purple Lobelia*. "Stem erect; leaves heart-shaped, polished, obscurely toothed, on foot-stalks; corymbus terminating;" stem dividing into four or five branches, thinly set with purple, small, flowers to the top. July to October. North America. 1739. A.

6. *L. Urens*. *Stinging Lobelia*. "Stem nearly upright; lower leaves roundish, crenate; upper leaves lance-shaped, serrate; flowers in a raceme, spike-



like;" corolla rough, bright blue; tube narrow; whole plant milky, of a pungent taste. June. England. A.

LVI. COFFE'A. Its true name, according to Bruce, is Caffa, from that province of Africa in which it grows spontaneously in great abundance. Nat. ord. *Linn.* Stellatæ. *Juss.* Rubiaceæ. 8 Species.

1. *C. Ara'bica.* *Arabian Coffee Tree.* "Flowers five-cleft; berries with two seeds; leaves oblong, acuminate; peduncles axillary, aggregate;" an ever-green shrub, from fifteen to twenty feet high; flowers white, sessile, axillary, four or five together, sweet scented, soon falling off; berry oval, globular, of a dark red when fully ripe. This is the only species that has been raised in the hot-houses of Europe, and is highly ornamental and elegant. August to October. Arabia. 1686. E. S. Hot Ho.

Coffee as a beverage seems to have been first introduced into England about the year 1652. Upon its importance as an article of commerce it would be superfluous to expatiate.

LVII. LONICE'RA, in honour of Adam Lonicer, a Physician and Botanist of Franckfort, who died 1586. Nat. ord. *Linn.* Aggregatæ. *Juss.* Caprifoliæ. 20 Species.

\* *Stems twining.*

1. *L. Caprifol'ium.* *Perfoliate or Italian Honey-*



*suckle*. "Flowers ringent, in whorls, terminal, sitting; upper leaves perfoliate;" stems shrubby, woody; almost all the leaves combined, smooth, entire, glaucous beneath; flowers spreading, pale yellowish with a flesh-coloured tube; a variety more red, sweet scented: berries orange red. May. South of Europe. 1596. S.

2. *L. Dioica*. *Glaucous Honeysuckle*. "Flowers in whorls somewhat headed, and having floral leaves; leaves glaucous, mostly perfoliate; corollas ringent, gibbous at the base," yellowish, blush-colour. June. North America. 1766. P.

3. *L. Sempervirens*. *Trumpet Honeysuckle*. "Flowers in nearly naked spikes, terminal; the upper leaves perfoliate, connate, roundish; corolla ringent, gibbous at the base;" outside of the flower scarlet, inside yellow, scentless; spike composed of three or four whorls one above another. May to August. Virginia. 1656. E. S.

Var. 1. Smaller, leaves oblong, from Carolina.

4. *L. Gra'ta*. *Evergreen Honeysuckle*. "Flowers in whorls, terminal; leaves perennial, lucid, glaucous beneath, inversely egg-shaped, upper ones perfoliate; corollas ringent;" branches strong, bark purple; flowers red on the outside, yellow within, of an aromatic odour. June to October. North America. 1739. E. S.

5. *L. Implex'a*. *Minorca Honeysuckle*. "Flowers in terminating whorls; floral-leaves smooth; leaves



perennial, smooth, oblong, the upper ones connate, perfoliate; the very top leaves dilated; flowers nearly as the former; leaves smaller and narrower than in the other sorts. June to September. Minorca. 1772. E. S.

6. *L. Periclymenum*. *Common Honeysuckle or Woodbine*. "Flowers in egg-shaped heads, terminal, tiled; leaves all separate, deciduous; corolla ringent;" leaves opposite, on short foot-stalks, flowers white and blush-coloured, very fragrant; berry red. May to July. Britain. S.

Var. 1. *Serotina*, the late red. 2. *Belgica*, the Dutch, which may be made to form a stem and head. 3. *Quercifolia*, the oak-leaved.

\*\* *Stalks bearing two flowers.*

7. *L. Ni'gra*. *Black-berried upright Honeysuckle*. "Leaves elliptical, entire, small; berries distinct;" stem three or four feet high; foot-stalks slender, axillary, opposite; corolla purple on the outside, white within; berries black. March, April. France. 1683. S.

8. *L. Tarta'rica*. *Tartarian upright Honeysuckle*. "Leaves heart-shaped, obtuse; berries distinct;" leaves smooth, on short foot-stalks; involucre lanceolate; corolla pale flesh-colour; berry red; stems about four feet high. April. Russia. 1752. S.

9. *L. Xylos'teum*. *Upright or Fly Honeysuckle*. "Berries distinct; leaves entire, downy;" stem upright, bushy, branched; leaves opposite, ovate, on



foot-stalks; flowers in pairs, yellowish white tinged with red, downy, inodorous; berries oval, red. May. Britain. S.

10. *L. Pyrena'ica*. *Upright Pyrenean Honey-suckle*. "Leaves oblong, smooth; berries distinct;" stems three or four feet high, divided into irregular branches; flower-stalks containing two white flowers, deeply cut into five segments. May. The Pyrenees. 1739. S.

11. *L. Alpi'gena*. *Red-berried upright Honey-suckle*. "Leaves egg lance-shaped; berries united in pairs;" leaves smooth, dark green above, pale underneath, entire, on foot-stalks; flowers on long slender stalks, red without, pale within, erect; berries ovate, red, joined at the base. April. Switzerland. 1596. S.

12. *L. Cœru'lea*. *Blue-berried upright Honey-suckle*. "Berries united, globular; styles undivided;" branches slender; flowers pale, two on a short stalk; berries dark blue; leaves opposite, egg-shaped, downy when young. March. Switzerland. 1724. S.

\*\*\* *Stem erect, stalks many flowered.*

13. *L. Symphoricar'pos*. *Shrubby St. Peter's Wort*. "Flowers in heads, and lateral, on foot-stalks; leaves nearly sessile," opposite in pairs, ovate; flowers in whorls round the stalk, of a greenish colour, small; berry hollow, and fleshy; corolla nearly bell-shaped. August. North America. 1730. S.



14. *L. Diervilla*. *Yellow-flowered upright Honeysuckle*. "Racemes terminal; leaves serrate;" stem about three feet high; bark reddish; leaves oblong, pointed, opposite; flowers small, pale yellow, two or three together; berries oval, black. June. North America. 1738. S.

Few plants are more generally known and admired than several species of Honeysuckle, whose beauty is only exceeded by their exquisite fragrance; the woodbine, though as common nearly as any hedge plant, has never lost its estimation.

LVIII. *TRIOSTRUM*, *trios*, three, and *stron*, a bone, on account of the three hard seeds. Nat. ord. *Lin.* Aggregate. *Juss.* Caprifoliæ. 3 Species.

1. *T. Perfoliatum*. *Perfoliate Fever Root*. "Leaves connate; flowers sessile, in whorls;" stem two feet high, downy; leaves in cross pairs, three or four inches long; flowers downy, dark purple; berry purple. July. North America. P.

2. *T. Angustifolium*. *Narrow-leaved Fever Root*. "Leaves elliptic, lanceolate, slightly connate; peduncles opposite, one flowered, axillary; flowers and berries yellow;" flowers single, not in whorls as in the last species. July. North America. 1699. P.

The roots of both these plants are used indiscriminately in North America, as an emetic, in the place of *Ipecacuanha*, the leaves of which plant much resemble those of the first species.



LIX. RHAM'NUS, from *ραιω*, to destroy, and *μενος*, strength, on account of its cathartic qualities. Nat. ord. Linn. Dumosæ. Juss. Rhamni. 32 Species.

\* *Branches armed with terminal thorns.*

1. R. Cathar'ticus. *Common Buckthorn*. "Flowers four cleft, diœcious; leaves ovate; stem erect; berry with four seeds;" a rigid bushy shrub; flowers yellowish green; stigma four-cleft; berry round, black. June. England. S.

2. R. Infecto'rius. *Yellow or Turkey-berried Buckthorn*. "Flowers four-cleft, diœcious; stem procumbent; leaves smaller than in the last species, woolly underneath;" segments of the calyx the length of the tube, not longer; flowers yellowish green. July. South of Europe. 1683. S.

3. R. Saxa'tilis. *Rock Buckthorn*. "Stem spreading; flowers four-cleft; hermaphrodite; leaves oblong, serrated, smooth, deciduous;" flowers pale yellow; stigma in two deep divisions; berries black. June. Austria. 1775. S.

\*\* *Branches without thorns.*

4. R. Fran'gula. *Alder Buckthorn, or Berry bearing Alder*. "Flowers one-styled; leaves very entire, smooth; berry two-seeded; style simple, short; stigma cloven;" flowers whitish, with very minute stamens and petals; berry black, roundish. Dwarf and mountainous species are perhaps only varieties of this. May. England. S.

5. R. Alater'nus. *Common Alaternus*. "Flowers



dioecious; stigma in three segments; leaves ovate, serrate, leathery, smooth, yellowish green; stem erect;" flowers copious, in clusters, axillary, yellowish; berries dark purple, with two or three seeds. There is a variety with jagged and narrow leaves, and one also with blotched leaves. This plant is sometimes confounded with *Phillyrea*, but in this the leaves are alternate, in that opposite, besides other distinctions. April to June. South of Europe. 1629. E. S.

The berries of *R. Catharticus* are still used in medicine, though those of *R. Frangula* are sometimes substituted in their place; they afford also a saffron colour: the berries of *R. Infectorius* are used in dyeing the yellow morocco leather; and perhaps also those of the narrow-leaved variety of *Alaternus*, under the name *Grain D'Avignon*, or French berry.

LX. *ZIZIPHUS*, a name used by the Ancients, its meaning not known, probably of African origin. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 10 Species.

1. *Z. Volu'bilis.* *Twining Ziziphus, or Supple Jack.* "Leaves ovate, acute, nerved, somewhat wavy; umbels axillary and terminal, stalked;" flowers small, greenish yellow; stem shrubby, twining, reddish. July. Carolina. 1714. S.

2. *Z. Paliu'rus.* *Christ's Thorn.* "Prickles in pairs, the lower reflexed; flowers three-styled; fruit leathery, with a winged margin," something like a



head having on a broad-brimmed hat; a small upright tree; leaves alternate, ovate, stalked, crenate, smooth; stipules small, pointed, changing into prickles; flowers in short axillary clusters, of a greenish yellow. July. South of Europe. 1596. T.

3. *Z. Vulgaris*. *Common Jujube*. "Prickles in pairs, unequal; leaves ovate, abrupt, bluntly serrated, smooth; flowers in axillary tufts; fruit elliptical;" a small tree; leaves rather crowded, on short stalks; flowers yellowish, drupe, like an olive, blood red, sweet. August. South of Europe. 1640. T. Gr. Ho.

4. *Z. Lo'tus*. *Barbary Ziziphus, or the Genuine Tree Lotus*. "Prickles in pairs, one of them recurved; leaves ovate, crenate; fruit crowded;" a very branching shrub, about six feet high; flowers as in the last; fruit smaller, rounder, and sweeter, the size of a Sloe, with a large stone, it is borne on every part of the branches. Africa. 1731. S. Gr. Ho.

This genus was formerly united with the last. The second species has been long preserved in curious gardens, for the sake of its singularity, or perhaps for the reputation of its being the thorn with which our Saviour was crowned, and which its pliant and prickly nature renders probable; as such, it is commonly delineated by Italian painters. These shrubs rarely produce fruit in England. The common Jujube is used as a dry sweetmeat in the South of Europe: the last species is now generally allowed to be the Lotus of the Lotophagi in Homer; the



fruit is sweet, it is sometimes bruised and made into a sort of paste, which is stored for use.

LXI. CEANO'THUS, from *κειω*, to prick, and *ανωθεν*, from above, it being a prickly shrub. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 5 Species.

1. *C. America'nus.* *American Ceanothus, or New Jersey Tea.* "Leaves egg-shaped, acute, three nerved at the base, serrate; panicles axillary, on long peduncles;" a shrub three or four feet high; flowers small, white, very numerous. July to October. North America. 1713. S.

This is a very ornamental shrub; its leaves are used in America by the common people instead of Tea, which they call from its Indian name, Pongpong Tea.

LXII. CELAS'TRUS. Theophrastus calls some wild evergreen trees *κηλαστρους*, probably from *κηλα*, a weapon. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 32 Species.

1. *C. Bulla'tus.* *Virginian Staff Tree.* "Unarmed; leaves ovate, entire, alternate, stalked; panicle terminal;" a shrub eight or ten feet high; stems several; flowers white, in loose spikes; fruit scarlet, with small protuberances. July. Virginia. 1771. S.

2. *C. Scan'dens.* *Climbing Staff Tree.* "Unarmed, stem twining; leaves acute, oblong; serrate; racemes terminal;" leaves alternate, stalked,



smooth; flowers small, whitish green; the stems twine about other trees so closely, as finally to destroy them; capsules red. May and June. North America. 1736. S.

LXIII. EUO'NYMUS, by an antiphrase, from *eu*, good, and *onyma*, a name; the plants being reputed poisonous. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 7 Species.

1. E. Europæ'us. *Common Spindle Tree.* "Flowers mostly with four stamens and four petals; flower stalks compressed; stigmas awl-shaped; leaves smooth;" bluntly serrate, lanceolate, opposite; flowers in small branches from the side of the stalks, whitish, spread in form of a cross. In hedges it appears to be a shrub, but planted singly it will grow to twenty feet. May and June. Britain. S.

2. E. Latifo'lius. *Broad-leaved Spindle Tree.* Flowers chiefly with five stamens and petals; bark smooth; flower-stalks thread-form, round, many flowered;" leaves sharply serrate; angles of the capsules sharp; petals first white, afterwards purple; fruit pendulous; all the parts of this tree are larger than the preceding, stem, leaves, and fruit. June, July. Austria. 1720. T.

3. E. Verruco'sus. *Warted Spindle Tree.* "Flowers with four stamens and petals; bark warted; peduncles thread-form, mostly three-flowered;" corolla reddish; capsule small, out of which the black



seeds hang by slender threads. June. Austria. 1763. S.

4. *E. Atropurpureus*. *Purple flowered Spindle Tree*. "Flowers with four stamens and petals; peduncles compressed, many flowered; stigmas four sided, lopped;" leaves oblong, lanceolate, smooth, serrate, the edge purplish; flowers dark purple. July. North America. 1756. S.

5. *E. America'nus*. *Evergreen Spindle Tree*. "Peduncles chiefly three flowered; leaves egg lance-shaped, sitting; branches smooth;" flowers with five stamens; leaves opposite, evergreen, sometimes variegated; flowers at the ends and sides of the branches, in small clusters, of an herbaceous dullish white. July. North America. 1713. E. S.

These are all ornamental plants—their berry-like seeds serve to decorate rustic kitchens at Christmas. The wood is useful to make skewers and spindles.

LXIV. VITIS, from *viere*, to tie; in allusion to the flexibility of its branches. Nat. ord. *Linn.* *Hedera-cæ*. *Juss.* *Vites*. 12 Species.

1. *V. Vinifera*. *Common Vine*. "Leaves lobed, indented, naked;" stem woody, tough, sending out long trailing branches; leaves alternate, on longish stalks; tendrils opposite to each foot-stalk, spiral, divided; flowers numerous, small, green, fragrant; fruit, when cultivated, in endless varieties; seeds naturally five, but in colder climates fewer. June to



July. Native of most of the temperate parts of the world. T.

Var. 1. V. Corinthiaca, the small Corinthian Grape, without seeds.

Var. 2. V. Laciniosa, Parsley-leaved Vine, indents of the leaves, many cleft.

2. V. Labrus'ca. *Downy-leaved Vine*. "Leaves heart-shaped; mostly three-lobed, toothed, woolly beneath; flowers very small, pale;" berries few, black, large, of a disagreeable foxy smell; whence they are called Fox Grapes; they are rarely produced in England. June. North America. 1656. T.

Var. 1. V. Vulpina, with leaves smooth on both sides. North America.

3. V. Arbo'rea. *Pepper Vine*. "Leaves more than doubly compound; leaflets ovate, partly wedge-shaped, cut; clusters lateral, corymbose, very close, somewhat forked;" flowers very small, white; rarely succeeded by berries in England; stem upright. July, August. North America. 1700. T.

4. V. Hedera'cea. *Five-leaved Vine, or Virginian Creeper*. "Leaves in fives; leaflets ovate, pointed, serrate, smooth;" clusters zig-zag, corymbose; flowers green; petals concave, cohering at the summit; berries blueish black, small; the tendrils attach themselves to the smoothest flint. July. North America. 1629. T.

The last species is, by some authors, arranged as a



*Hedera*. It has long been cultivated for covering buildings, and will thrive in the close courts of London. The leaves, in autumn, assume beautiful tints of red and orange. Upon the importance of the Common Vine it is useless to enlarge. It appears to have been early introduced into Britain by the Romans—most of the ancient monasteries were furnished with vineyards. In England the vine is rather a shrub than a tree; but on the Barbary coast its stem, in circumference, is of the surprising dimensions of eight or nine feet. In the forests of Carolina it runs up and overtops the tallest trees.

LXV. IMPA'TIENS, so called from the elasticity of the seed vessel, which bursts at the touch. Nat. ord. *Lin.* Corydales. *Juss.* Gerania. 12 Species.

1. *I. Balsa'mine*. *Garden Balsam*. "Peduncles one-flowered; aggregate, leaves lanceolate, upper leaves alternate; nectary shorter than the flower;" stem dividing into many succulent branches; flowers coming out from the joints of the stem, red or white; by cultivation striped, purple, and double. July to October. East Indies. 1596. A. Hot Ho.

2. *I. Noli-me-tan'gere*. *Yellow Balsam, Touch me not, or Quick in Hand*. "Peduncles many flowered, solitary; leaves egg-shaped; joints of the stem swelling;" leaves alternate, stalked, serrated; flowers pendulous, yellow, with red dots within. June. England. A.

The first species has been long a favourite of amateurs, and by attention most beautiful plants are produced,



loaded with flowers, and forming a bush. The second is curious from the singular elasticity of the capsule, which it is really entertaining to observe.

LXVI. VI'OLA, from the Greek *iota*, which has a variety of meanings; but none particularly applicable to this delightful flower. Nat. ord. *Linn.* Campanaceæ. *Juss.* Cisti. 39 Species.

\* *Without stems.*

1. V. Palma'ta. *Palmated Violet*. "Leaves hand-shaped, five lobed, toothed, and undivided;" flower-stalks, with a pair of floral leaves below the middle; flowers light blue, whitish at the base, inodorous; but rarely cultivated. May. North America. 1739. P.

2. V. Peda'ta. *Cut-leaved Violet*. "Leaves bird foot-shaped, smooth, with seven or nine lanceolate lobes;" rare in our gardens; flowers larger than in the preceding, light blue; anthers orange, inodorous. May. North America. 1759. P.

3. V. Sagitta'ta. *Arrow-leaved Violet*. "Downy; leaves oblong, acute, somewhat serrated, heart-shaped, cut at the base; calyx linear, smooth;" three lower petals of the corolla bearded at the base; flowers blue, lower petals white towards the bottom, with purple veins. July. Pennsylvania. 1775. P.

2. V. Lanceola'ta. *Spear-leaved Violet*. "Smooth;



leaves lance-shaped, obscurely crenate, shorter than their foot-stalks;" flowers white, three of the petals marked with purple ribs. June. North America. 1785. P.

5. *V. Obliqua*. *Oblique flowered Violet*. "Smooth; leaves heart-shaped, acute; flattish, acutely crenate; flowers erect, petals bent obliquely," white, with purple and yellow veins; leaf-stalks long. June. North America. 1762. P.

6. *V. Cucullata*. *Hollow-leaved Violet*. "Leaves heart-shaped, acute, serrated, smooth, hooded at the base; petals of the corolla twisted," obtuse, largish, light purplish blue, with dark veins, the centre white. July. North America. 1772. P.

7. *V. Primulifolia*. *Primrose-leaved Violet*. "Leaves ovate, somewhat heart-shaped, obtuse, running down into the bordered foot-stalk; calyx naked;" flowers small, pale flesh-coloured, or bluish. June. North America. 1783. P.

8. *V. Hirta*. *Hairy Violet*. "Leaves heart-shaped, hairy, as well as their foot-stalks; calyx obtuse;" runners short; floral leaves below the middle of the stalk; flowers light greyish blue, streaked with black, scentless; whole plant, soft, hoary. April. Britain. P.

9. *V. Palustris*. *Marsh or Bog Violet*. "Leaves kidney-shaped, smooth, on long foot-stalks, root creeping; two lateral petals of the corolla bearded;"



flowers scentless, pale blue, or flesh-colour, streaked partly with red; a pretty plant growing in bogs, but not easily cultivated. June. Britain. P.

10. *V. Odora'ta. Sweet Violet.* "Runners creeping, leaves heart-shaped, on foot-stalks, both smooth; calyx obtuse;" floral leaves above the middle of the stalk; flower dark purplish blue, of a delightful odour; it varies with white petals; sometimes double, and frequently it is without petals. March. Britain. P.

\*\* *With leafy stems.*

11. *V. Cani'na. Dog's Violet.* "Stem when more adult ascending, channeled; leaves oblong, heart-shaped, crenate; calyx acute;" the earlier flowers from the root, the later from the stem, axillary; pale blue, scentless, sometimes white. April to June. Abundant throughout the whole of Europe. P.

*V. Lactea*, or Cream-coloured Violet, is perhaps only a variety of this.

12. *V. Monta'na. Mountain Violet.* "Stems erect; leaves ovate, oblong, somewhat heart-shaped, stalked, stipulas wing-cleft on one side;" flower-stalks axillary, bearing a large greyish blue inodorous flower; the plant from six to sixteen inches high. May and June. The Alps. 1714. P.

13. *V. Canaden'sis. Canadian Violet.* "Stem erect, roundish; leaves heart-shaped, pointed, smooth; stipulas entire;" flowers sweet-scented, pur-



plish blue outside, white within, veined ; capsule globular, woolly. June. North America. 1783. P.

14. *V. Stri'ata. Streaked Violet.* "Stem erect, semi-cylindrical ; leaves egg heart-shaped, pointed, smooth, serrate ; stipulas lance-shaped, serrated, fringed ;" capsule smooth ; flowers white, with purple veins. This much resembles the last species. June. North America. 1772. P.

15. *V. Pubes'cens. Downy Yellow Violet.* "Stem erect, simple, downy, leafy at the top ; leaves triangular, heart-shaped, pointed, hairy ; stipulas ovate, serrate at the tips ;" herb rather succulent, pubescent ; flowers yellow, with brown veins. June. North America. 1772. P.

16. *V. Mira'bilis. Broad-leaved Violet,* "Stem erect, triangular ; leafless in the middle ; leaves kidney heart-shaped, acute, crenate, smooth ; stipulas lanceolate ;" radical leaves on long stalks ; upper leaves on short ones ; lower flowers reddish purple, with a veiny lip ; upper flowers without petals, but alone perfecting seed ; which circumstance gives it the specific name. July. Germany. 1732. P.

17. *V. Biflo'ra. Two flowered Violet.* "Stem erect, two-flowered ; leaves kidney-shaped, stalked, serrate, smooth ; stipulas ovate, entire ;" stem simple, about three inches high, bearing three or four leaves ; flowers small, yellow, lip streaked with black. April. The Alps. 1739. P.

18. *V. Con'color. Green flowered Violet.* "Stem



erect, downy; Leaves elliptic, lance-shaped; stipulas linear, lanceolate;" stem from one to two feet high, angular, furrowed; flowers small, green, on axillary stalks, two together, one of them imperfect; rare in English gardens. June. North America. 1788. P.

\*\*\* *Stipulas wing-cleft. Stigma pitcher-shaped.*

19. V. Tricolor. *Pansy Violet, Heart's Ease, Three Faces under a Hood, Love in Idleness, John come kiss me.* "Stem angular, diffuse; leaves oblong, deeply crenate; stipulas lyrate;" flower-stalks axillary, solitary, firm, longer than the leaves; calyx leaves dilated at the base; petals yellow, purple and white; various in size and colour, from the splendid velvet-like pansy of the garden, to a most minute pale plant growing in the scorix of Mount Etna. May to September. Native throughout Europe. A.

20. V. Grandiflora. *Great Mountain Yellow Violet.* "Stem angular, unbranched; leaves ovate, oblong, crenate; stipulas lyrate, many cleft;" flowers pale yellow; lateral petals marked with a few black lines; spur of the corolla slender, slightly curved. The whole plant much resembles the preceding. V. Lutea, a British plant, is thought by some to be a variety of this; as is also V. Calcarata, or Dwarf Mountain Violet, having a light purple flower with black lines at bottom. May to September. Britain. P.

21. V. Cornuta. *Horned Violet.* "Stem elong-



gated, angular, branched ; leaves heart-shaped, crenate ; stipulas sessile, wing-cleft ; calyx leaves awl-shaped, taper-pointed, shorter than the spur ;" the stems form large lax tufts, producing abundance of pale purple inodorous flowers ; the spur is slender, ascending, near an inch long. May. The Pyrenees. 1776. P.

The American species of this genus are not generally, indeed they are seldom cultivated in English gardens. The Pansy and the Sweet Violet have, throughout Europe, been at all times universal favourites ; the latter, besides its fragrance, is remarkable for affording its colour to a syrup, sometimes given to children as a mild purgative, and also used as a test to detect an acid or an alkali ; the acid changing the blue colour of the syrup to a red—the alkali to a green.

LXVII. CLAYTONIA, from John Clayton, who collected plants in Virginia ; an account of which was published by Gronovius, 1743. Nat. ord. *Linn.* Succulentæ. *Juss.* Portulacæ. 3 Species.

1. C. Virginica. *Virginian Claytonia*. " Leaves linear, lanceolate ; petals entire ;" stems about three inches high, slender ; root leaves linear ; stem leaves two, opposite ; flowers white, spotted, or streaked with red in the inside, in a loose terminal bunch. March to May. Virginia. 1759. P.

LXVIII. I'ŒA, *œa*, is a general appellation for



willows, derived from *sevat*, to go; in allusion to the quickness of their growth. Nat. ord. *Linn.* Bicornes. *Juss.* Rhododendra. 2 Species.

1. *I. Virg'nica. Virginian Itca.* "Leaves ovate, acute, serrated;" a shrub, five or six feet high, branched; flowers white, or yellowish, composed of numerous spikes; the general appearance of this shrub much resembles the *Prunus Padus*, or Bird Cherry. June to August. North America. 1744. S.

LXIX. *Ri'b'es*, a name said to be from the Arabic. Nat. ord. *Linn.* Pomaceæ. *Juss.* Cacti. 16 Species.

\* *Stem without prickles.*

1. *R. Ru'brum. Common Currant.* "Clusters smooth, pendulous; flowers flattish; petals inversely heart-shaped; leaves obtusely five-lobed; stem erect," bushy; leaves on long stalks, veiny, somewhat downy; flowers pale green; fruit red. April. Britain. S.

Var. 1. with white fruit.

2. *R. Petræum. Rock Currant.* "Clusters erect, somewhat hairy, pendulous when in fruit; flowers flattish; petals obtuse; leaves acutely lobed; floral leaves shorter than the flowers; stem erect;" leaves more downy; flowers often stained with red; berries bright red, very acid; thought by some to be only a variety of the preceding. April. Britain. S.

Var. 1. *R. Spicatum*, with flowers and fruit in erect spikes.

3. *R. Glandulo'sum. Glandulous Currant.* "Clus-



ters erect, rough, with glandular hairs;" flowers flat-tish, yellowish, tinged with red; leaves acutely lobed, toothed; floral leaves minute; berries hispid, red; stem creeping with ascending branches. April and May. North America. 1777. S.

4. *R. Alpinum*. *Tasteless Mountain Currant*. "Clusters erect; floral leaves longer than the flowers; leaves smooth, shining at the back; stem erect, berries smooth," red and insipid; flowers often diæcious; leaves rounder and smaller than in the first species. May. Britain. S.

5. *R. Nigrum*. *Black Currant*. "Leaves dotted underneath, bunches lax, downy; flowers bell-shaped; stem erect," lower than *R. Rubrum*; leaves five-lobed, smelling strong when bruised; berries large, black, smooth; each bunch always accompanied at the base by a solitary stalk bearing a single currant, larger and earlier than the rest. May. Britain. S.

6. *R. Floridum*. *Pennsylvanian Black Currant*. "Leaves three-lobed, cut, dotted with glands on both sides; clusters pendulous, downy, calyx somewhat cylindrical; floral leaves as long as the flowers," which are pale yellow; berries black. April to May. North America. 1732. S.

\*\* *Stems prickly.*

7. *R. Diacan'tha*. *Two spined Gooseberry*. "Prickles in pairs, in place of stipulas; leaves wedge-shaped; deeply three-cleft, bluntly notched; clusters



smooth, nearly erect;" flowers small, greenish yellow; berries dusky red; a sort of intermediate species between currants and gooseberries; excepting the prickles at the buds, unarmed. April. Siberia. 1781. S.

8. *R. Grossula'ria. Rough Gooseberry.* "Prickles solitary, or three together, branches spreading; foot-stalks hairy; single flowered; floral leaves two; fruit hairy," green, red, or yellow; leaves bluntly three-lobed, cut; flowers drooping, green. March to April. Britain. S.

Var. 1. *R. Uva Crispa*, or Smooth Gooseberry; fruit smooth.

Var. 2. *R. Reclinatum*; stem somewhat declining.

9. *R. Oxyacanthoides. Hawthorn Gooseberry.* "Branches clothed with bristly prickles; leaves smooth, three-lobed, notched;" flowers drooping, one or two on each stalk; fruit the size of a black currant, dark purple, smooth. It differs from the common Gooseberry, in having the stem clothed thickly with small prickles, besides the larger ones common to both. May. Canada. 1705. S.

10. *R. Cynos'batii. Prickly fruited Gooseberry.* "Branches smooth, prickles one or two under each bud, simple; leaves five-lobed, downy beneath; clusters drooping, few flowered;" flowers green; berries the size of a hazel nut, armed all over with stout prickles. April. Canada. 1759. S.

These most excellent and useful fruits are natives of



the more northerly regions; they appear to have been unknown to the Greeks and Romans, and indeed the southern nations of Europe have no appropriate name for them even at this day. Their application to culinary purposes, in the form of tarts, jellies, and for wine, is too well known to be insisted on.

LXX. HE'DERA, perhaps from *edendo*, eating, because it devours trees; or from *hæres*, to adhere. Nat. ord. *Linn.* Hederaceæ. *Juss.* Caprifolia. 4 Species.

1. H. He'lix. *Common Ivy*. "Upper leaves ovate, lower leaves five-lobed;" branches long and flexible, creeping, adhering closely to walls and trees by short fibres; flowers green, of many umbels, forming a corymbus; berry black. September. Britain. E. S.

By some authors the *Vitis Hederacea* is arranged under this genus, by the name *H. Quinquifolia*. Our common Ivy, so frequent upon old walls and trees, is known to every one; in dark woods it will creep on the ground, taking root its whole length, so as with difficulty to be eradicated. If permitted to run up a stake it becomes a very picturesque object, from the singular complication of its branches.

LXXI. LAGŒ'CIA, from *λαγώς*, a hare, and *οικος*, a dwelling; in allusion to the seed nestling amongst its bristly coverings, like a hare amongst grass. Nat. ord. *Linn.* Umbellatæ. *Juss.* Umbelliferæ. 1 Species.

1. L. Cuminoïdes. *Wild Cumin*. Stem ten or



twelve inches high, zig-zag, leafy; leaves smooth, pale green, simply pinnate, with about a dozen pair of roundish leaflets opposite, with an odd one; umbels terminal, dense, globose, beset with shining silvery points; flowers greenish yellow; seeds solitary, hoary, warm, carminative. July. The Levant. 1708. A.

LXXII. ILLE'CEBRUM. *Illecebra*, pretty or enticing plants. Nat. ord. *Linn.* Holoraceæ. *Juss.* Amaranthi. 19 Species.

1. I. Verticilla'tum. *Whorled Knot Grass*. "Flowers in whorls, naked; stems procumbent;" branches slightly hairy, about three inches high: leaves opposite, oval, sessile; flowers small, sitting in the axils of the leaves, white, shining. July. England. P.

2. I. Parony'chia. *Mountain Knot Grass*. "Flowers fenced with shining bractes; stems procumbent; leaves even;" stalks trailing, about two feet long, the heads of whitish flowers, come out from the joints of the stalks, surrounded by silvery floral leaves. May to August. South of Europe. 1640. P.

LXXIII. CELO'SIA, derivation unknown. Nat. ord. *Linn.* Holoraceæ. *Juss.* Amaranthi. 18 Species.

1. C. Crista'ta. *Common Cockscorb*. "Leaves lance egg-shaped, recurved, somewhat waved; flower-stalks angular; spikes oblong, crested;" stem angu-



lar; spikes somewhat branched at the base; various in form, size, and colour; yellow, red, purple, or variegated with all. July to September. Asia. 1570.

A. Hot Ho.

2. *C. Cocci'nea. Scarlet or Chinese Cocksomb.* "Leaves egg-shaped, stiff; stem furrowed; spikes manifold;" stem four or five feet high, branched; leaves very large; spikes axillary, and terminal; branched, tufted, of a beautiful scarlet; it differs from the preceding in having leaves three times as thick; flowers wholly scarlet; and stamens shorter, instead of longer, than the corolla. July to October. China. 1597. A. Hot Ho.

These are the most showy and ornamental species of this fine genus, long known and admired in England; their perfection consists in having an upright unbranched leafy stem, with the flower heads large, close, erect, and regular. They are sometimes called Amaranths, and consequently confounded with Prince's Feather, of the genus *Amaranthus*, in the class *Monœcia*.

LXXIV. *THE'SIUM*, derivation unknown; perhaps from Theseus, king of Athens. Nat. ord. *Linn.* *Vepreculæ. Juss. Eleagni.* 19 Species.

1. *T. Umbella'tum. Umbelled Thesium, or Toad Flax.* "Flowers in umbels; leaves oblong;" stem about a foot high; flowers greenish, three or four together, on small umbels; three or four floral leaves under each umbel; reflexed; plant herbaceous, hav-



ing the appearance of an annual Euphorbia. June. North America. 1782. P.

2. *T. Linophyllum*. *Bastard Toad Flax*. "Stem erect, somewhat branched; spike branched; floral leaves in threes; leaves linear, lanceolate;" tube of the calyx short, cup-shaped: plant smooth; stems rigid, a span high; flowers green, margin white. July. Britain. P.

*Order Digynia.*

LXXV. STAPE'LIA, named by Linnæus, in honour of Dr. Stapel, a physician at Amsterdam, commentator of Theophrastus, 1644. Nat. ord. *Linn.* Contortæ. *Juss.* Apocineæ. 49 Species.

1. *S. Hirsu'ta*. *Hairy Stapelia, or Carrion Plant*. "Branches succulent, ascending, quadrangular, with erect teeth, flowering at the base; corolla hairy at the margin and centre;" segments of the corolla ovate, acute, wrinkled, leathery; flowers on long stalks, large, handsome, chocolate colour, streaked across with yellow; scent so much like carrion that the flesh fly lays its eggs upon it. July. The Cape. 1714. P. The dry stove.

2. *S. Variega'ta*. *Variegated Stapelia*. "Stem branched upwards, quadrangular, with spreading teeth; leaflets of the crown undivided;" corolla large, thick, greenish without, yellow within, spotted with purple, resembling a frog's belly; smelling like rotten cheese. July. The Cape. 1690. The dry stove.



LXXXVI. CYNAN'CHUM, from κυων, a dog, and αγγω, to strangle; it being supposed to kill dogs. Nat. ord. Linn. Contortæ. Juss. Apocineæ. 25 Species.

1. C. Acu'tum. *Acute-leaved Cynanchum, or Strangle Dog.* "Stem twining, herbaceous; leaves heart-oblong, smooth," in pairs, stalked; stems annual, six or eight feet long; flowers in small axillary bunches, pale flesh-colour; nectary bell-shaped, divided into five or ten segments; seeds crowned with a tuft of silky hairs; but are rarely produced in England. July. South of Europe. 1596. P.

2. C. Monspelia'cum. *Montpelier Cynanchum.* "Stem twining, herbaceous; leaves kidney heart-shaped, acute," smooth; stems very long, swelling at the joints; flowers in bunches, between two leaf-stalks; corolla deeply five parted, white above, pale rose-colour beneath; nectary pitcher-shaped, ten-cleft; the leaves are broader than in the former; both species abound in a milky juice, which when inspissated has been frequently sold for Scammony. August. South of Europe. 1597. P.

LXXXVII. PERIPLO'CA, from περι, about, and πλοκη, a binding or twining; the stems twisting about each other. Nat. ord. Linn. Contortæ. Juss. Apocineæ. 11 Species,

1. P. Græ'ca. *Common Periploca, Virginian Silk, or Climbing Dog's Bane.* "Flowers hairy within, ter-



minal; leaves ovate, acute;" stems twining, leaves opposite, on short stalks, smooth, shining; flowers corymbose, in bunches, inodorous, elegant, brown-purplish, velvety, flowering plentifully in August. The Levant. 1597. E. S.

LXXVIII. APO'CYNUM, from ἀνὸς, far, and κυνος, of a dog; because it was supposed to kill dogs. Nat. ord. Linn. Contortæ. Juss. Apocineæ. 14 Species.

1. A. Androsæmifo'lium. *Tutsan-leaved Dog's Bane*. "Stem rather straight, herbaceous; leaves egg-shaped, smooth on both sides; cymes terminal;" stem erect, about three feet high; leaves opposite; flowers white, with purplish nectaries; plant abounding with a milky juice, July to September. North America. 1731. P.

2. A. Canna'binum. *Hemp Dog's Bane*. "Stem rather straight, herbaceous; leaves oblong; cymes at the sides longer than the leaves;" stems about two feet high; leaves in pairs, smooth; like the former, abounding with a milky juice; flowers small, herbaceous, white. July to September. North America. 1699. P.

3. A. Hypericifo'lium. *St. John's Wort-leaved Dog's Bane*. "Stem rather straight, herbaceous; leaves oblong, heart-shaped, smooth; cymes shorter than the leaves; stems annual, with opposite, sharpish, somewhat sessile leaves, and small inodorous white flowers. June, July. North America. 1758. P.



4. *A. Vene'tum*. *Spear-leaved Dog's Bane*. "Stem somewhat straight, herbaceous; leaves ovate, lanceolate; leaves opposite, smooth;" flowers in small umbels, purple or white, larger than the former sorts. July, August. Venetian Isles. 1690. P.

LXXIX. ASCLEPIAS, from Æsculapius, the god of medicine. Nat. ord. *Linn.* Contortæ. *Juss.* Apocineæ. 41 Species.

\* *Leaves opposite, flat*

1. *A. Syria'ca*. *Syrian Swallow Wort*. "Leaves oval, woolly underneath; stem quite simple; umbels nodding;" stems strong, four feet high, near the top of which the flowers appear of a dingy purple, smelling sweet; succeeded by large oval pods. July, August. Virginia. 1629. P.

2. *A. Amæ'na*. *Oval-leaved Swallow Wort*. "Leaves egg-shaped, woolly underneath; stem simple; umbels and nectaries erect;" stems round, smooth; at each joint two large leaves, thickish, smooth, with purple nerves; lower leaves smaller; flowers bright purple. August. North America. 1732. P.

3. *A. Purpuras'cens*. *Purple Virginian Swallow Wort*. "Leaves egg-shaped, hairy underneath; stem simple; umbels erect; nectaries reversed;" stems many, at bottom quadrangular; leaves on short footstalks, midrib purple; flowers of a dusky herbaceous colour; nearly allied to No. 1. August, September. North America. 1732. P.



4. A. Variega'ta. *Variegated Swallow Wort*.  
"Leaves ovate, wrinkled, naked; stem simple, umbels nearly sessile; peduncles woolly;" stems with dusky purple spots; flowers dusky flesh-colour, resembling the last species; leaves rougher, umbels more compact. July. North America. P.

5. A. Ni'va. *White or Almond-leaved Swallow Wort*. "Leaves egg lance-shaped, smoothish; stem simple; umbels erect, lateral, solitary;" stems deep green; leaves pale, beneath; flowers green, with white nectaries. July to September. North America. 1732. P.

6. A. Incarna'ta. *Flesh-coloured Swallow Wort*. "Leaves lanceolate, stems divided at the top; umbels erect, donble;" flowers purple. August. North America. 1731. P.

7. A. Decum'bens. *Decumbent Swallow Wort*. "Leaves woolly; stem decumbent," hairy, a foot and a half high; leaves narrow; umbels compact; flowers bright orange. August. North America. 1731. P.

8. A. Vincetox'icum. *Officinal Swallow Wort, or Tame Poison*. "Leaves ovate, bearded at the base; stem erect; umbels proliferous;" stems two feet high, woody, hairy; leaves egg heart-shaped, smooth, on short foot-stalks; corolla white; seeds inclosed in cotton. June to August. Germany. 1597. P.

Var. 1. Lutea, with yellow flowers, leaves narrower.



9. *A. Nīgra*. *Black Swallow Wort*. "Leaves egg-shaped, bearded at the base; stem somewhat twining upwards;" much resembling the foregoing; flowers dark. June to August. France. 1596. P.

\*\* *Leaves opposite, rolled back at the sides.*

10. *A. Sibīrica*. *Siberian Swallow Wort*. "Leaves linear, lanceolate, opposite in threes; stem decumbent;" leaves sometimes alternate; flowers white. July. Siberia. 1775. P.

11. *A. Verticilla'ta*. *Whorl-leaved Swallow Wort*. "Leaves linear, in whorls; stem erect," slender; flowers small, white, in umbels at the top of the stems; leaves frequently four together. July. North America. P.

\*\*\* *Leaves alternate.*

12. *A. Tubero'sa*. *Tuberous-rooted Swallow Wort*. "Leaves lance-shaped; stem straddling, hairy," a foot high, dusky red; flowers of a bright orange; tuberous roots very large. August. North America. 1690. P.

By some later Botanists the species 8, 9, 10, are arranged under the genus *Cynanchum*. The peculiar structure of the flower in this genus, and the four preceding genera, has occasioned much perplexity, and has been differently understood; by some these plants are thought to belong to the class Gynandria, as the pollen is produced by five glands inserted upon the stigma. In *Asclepias* the species *Vincetoxicum* is most known, and was formerly thought to be an antidote to poisons: it certainly pos-



sesses active properties. The English name, Swallow-wort, is from a fancied resemblance of the follicles, or seeds, to a swallow flying.

LXXX. SWERTIA, named by Linnæus, in honour of Emanuel Swert, a cultivator of flowers in Holland, 1612. Nat. ord. *Linn.* Rotacææ. *Juss.* Gentianæ. 5 Species.

1. *S. Perennis.* *Marsh Swertia, or Fel Wort.* "Corolla in five segments; radical leaves ovate;" stem a foot high, leafy, terminating in a forked erect panicle of large blue greyish flowers, on purplish stalks. July. Wet mountains in Wales. P.

LXXXI. GENTIANA, from Gentius, king of Illyria, who discovered its virtues. Nat. ord. *Linn.* Rotacææ. *Juss.* Gentianæ. 56 Species.

\* *Corolla five-cleft, mostly bell-shaped.*

1. *G. Lu'tea.* *Yellow Gentian.* "Corolla with a flat border; flowers in whorls; calyx sheath-like;" lower leaves stalked, oblong, having five veins on the back; stem three or four feet high, with a pair of leaves at each joint; sessile; segments of the corolla from five to eight, yellow. June, July. The Alps. 1596. P.

2. *G. Purpurea.* *Purple Gentian.* "Corolla usually five-cleft, bell-shaped; flowers in whorls; calyxes lopped;" root very large; corolla dusky, or



pale purple, with dots running into lines. July. The Alps. 1768.

3. *G. Macrophylla*. *Broad-leaved Gentian*. "Flowers in whorls; root leaves equal to the stem, which is naked," a span long; leaves broad, lanceolate, five-nerved sheathing at the base; corolla small, of a livid pale-colour, the border blue; segments short and sharpish; August. Siberia. 1796. P.

4. *G. Punctata*. *Spotted flowered Gentian*. "Corolla bell-shaped, dotted; calyx with five teeth;" leaves ovate; corolla of a papery substance, thin, dull pale straw-colour, with very minute dots. July. The Alps. 1775. P.

5. *G. Asclepiadea*. *Swallow Wort-leaved Gentian*. "Corolla bell-shaped, opposite, sitting, leaves stem-clasping," pointed, five veined; flowers large, fine blue, sometimes white; anthers long, yellow. July. The Alps. 1629. P.

6. *G. Pneumonanthe*. *Marsh Gentian, or Calathian Violet*. "Corolla bell-shaped, peduncled; leaves linear," sitting; stem seldom branched, smooth; flowers three or four, deep blue, with greenish plaits. August. England. P.

7. *G. Saponaria*. *Soapwort-leaved Gentian*. "Corolla bell-shaped, swelling; flowers in whorls; leaves three-nerved," long, sharp pointed, spreading horizontally, from the axils of these come out three or four blue flowers. August. North America. 1776. P.

8. *G. Acaulis*. *Dwarf Gentian or Gentianella*,



" Corolla five-cleft, bell-shaped, higher than the stalk;" leaves ovate, lanceolate, spreading on the ground; in its wild state without a stem; when cultivated the stem is two or three inches long, with a pair of leaves, and terminated by one large flower, (rarely two) deep blue, dotted on the inside. April, May. The Alps. 1629. P.

*\*\* Corolla five-cleft, funnel-shaped.*

9. G. Bava'rica. *Bavarian Gentian*. " Corolla serrate; leaves ovate, obtuse; root-leaves crowded, imbricated;" stem a finger's length, with a pair of leaves towards the flower; border of the corolla spreading, of a fine blue. April. Switzerland. 1775. P.

G. Verna, a native species, scarcely differs from this, leaves sharper.

*\*\*\* Corolla five-cleft, salver-shaped.*

10. G. Cilia'ta. *Fringe-flowered Gentian*. " Corollas fringed; leaves linear, lanceolate; stem angular," smooth, leafy, terminated by upright sessile flowers of a blue colour, and obscurely quadrangular; tube greenish. August. Switzerland. 1759. P.

11. G. Crucia'ta. *Cross-wort Gentian*. " Corollas beardless; flowers in whorls, sessile;" leaves lanceolate, three-nerved, in pairs, cross-wise; flowers fewer from the lower axils, but more crowded from the top of the stalk, of a fine blue; segments of the corolla with teeth interposed between each. June, July. Austria. 1596. P.



This beautiful genus is chiefly perennial, of Alpine origin, where the lovely blue flowers enamel the turf in a most splendid manner. All are intensely bitter, especially the large roots of the first two species, which furnish a well-known tonic and stomachic tincture; these plants are difficult to rear and preserve, especially if at all within reach of the smoke of London. Nos. 5, 7, and 8. are the species most usually met with; they require a pure air and a moist loamy soil, and are extremely ornamental. We have some annual native species, but they are never seen in gardens.

LXXXII. VELE'ZIA, in honour of Christoval Velez, a Physician and Botanist of Madrid, about 1750. Nat. ord. *Linn.* Caryophyllei. *Juss.* Caryophyllææ. 1 Species.

1. V. Rí'gida. *Rigid Velezia*. Calyx thread-shaped, downy; petals of the corolla cloven; stems diffuse, zigzag; leaves linear, awl-shaped, sessile; flowers axillary, solitary, sessile; corolla small; border rose-colour, with a crimson mark on each petal, forming a central star. July. Spain. 1785. A.

LXXXIII. HEUCHE'RA, from J. H. Heucher, a Physician and Botanist of Wittenberg, 1712. Nat. ord. *Linn.* Succulentæ. *Juss.* Saxifragææ. 1 Species.

1. H. America'na. *American Heuchera* or *Sanicle*. Stems almost naked; panicle elongated; root-leaves seven-lobed, on long stalks, doubly and sharply crenate; flowers numerous, inconspicuous, brownish.



This plant, like the last, is rarely cultivated unless in curious gardens. May to July. Virginia. 1656. P.

LXXXIV. SAL'SOLA, from *Sal*, Salt, on account of its saline properties. Nat. ord. *Linn.* Holoraceæ. *Juss.* Atriplices. 25 Species.

1. S. Ka'li. *Prickly Salt-wort*. "Stem herbaceous, much branched, procumbent; leaves awl-shaped, spinous, rough; flowers axillary, margined," whitish, but turning reddish, each accompanied by three spinous bractes. On sandy shores almost all over the world. July, August. A.

2. S. So'da. *Long fleshy-leaved or French Salt-wort*. "Stems spreading; leaves without spines;" stem a foot high, with spreading branches; leaves awl-shaped, very long, furrowed; flowers axillary, yellowish green, inconspicuous. August. South of Europe. 1683. A.

3. S. Sati'va. *Spanish Salt-wort, or Barilla*. "Herbaceous, spreading; leaves cylindrical, smooth; flowers many together; leaves numerous, sessile; flowers inconspicuous, small, herbaceous. August. Spain. 1783. P.

4. S. Altis'sima. *Grass-leaved Salt-wort*. "Stem herbaceous, erect, much branched; leaves thread-shaped, acute, with the flower-stalks at their base;" stem three or four feet high; leaves alternate, sessile; flowers small, three together, herbaceous. This has



the appearance of a *Chenopodium*. August. Italy. 1775. A.

5. *S. Sal'sa. Stripe-stalked Salt-wort.* "Stem herbaceous, nearly erect; leaves linear, somewhat fleshy, awnless; calyx succulent, transparent;" stem striped, purplish; leaves scattered; flowers from three to five in a cluster, yellowish. August. Astracan. 1782. A.

6. *S. Frutico'sa. Shrubby Salt-wort.* "Erect; shrubby, much branched; leaves semi-cylindrical, bluntish, without spines," alternate, fleshy, smooth; flowers axillary, sessile, solitary, green. August. England. P.

7. *S. Murica'ta. Egyptian Salt-wort.* "Stem shrubby, spreading; branches hairy; calyx spinous;" branches slender, panicled; leaves alternate, linear, fleshy, soft, ash-coloured; flowers axillary, sessile, small, greenish, covering the branches. July, August. Egypt. 1773. A.

The sixth is the only species much cultivated in English gardens, where it forms a not inelegant evergreen. All of them are remarkable for producing, when burnt, the alkaline salt, so much esteemed in commerce, under the names of Soda and Barilla; *S. Soda* and *S. Sativa* in Spain are extensively cultivated for this purpose, but other plants are sometimes used with them, which deteriorate the value of the product.

LXXXV. CHENOPO'DIUM,  $\chi\eta\nu$ , a goose, and  $\pi\omicron\upsilon\varsigma$ ,



a foot, from the shape of the leaves. Nat. ord. *Linn.*  
*Holoraceæ.* *Juss.* *Atriplices.* 26 Species.

\* *With angular leaves.*

1. *C. Bo'nus Henri'cus.* *English Mercury, All-good, Good King Harry, Wild Spinach, Angular-leaved Goose-foot.* "Leaves triangular, arrow-shaped, entire; spikes compound, leafless, axillary;" leaves alternate, stalked, mealy beneath; flowers green, mealy; spikes numerous, dense; the young leaves are sometimes boiled as a substitute for spinach, and it is cultivated for that purpose. May to August. Britain. P.

2. *C. Bo'trys.* *Cluster or cut-leaved Goosefoot, or Oak of Jerusalem.* "Leaves oblong, sinuate, stalked; racemes naked, many-cleft;" flowers in short axillary bunches, herbaceous: the whole plant replete with a resinous juice; the leaves, when bruised, emit an odour somewhat resembling that of Ambrosia. June to September. South of Europe. 1551. A.

3. *C. Ambrosioi'des.* *Mexican Goosefoot, or Oak of Cappadocia.* "Leaves lance-shaped, toothed; racemes leafy, simple;" stem scored, leafy, thinly clothed with a fine down; flowers greenish, in axillary and terminal racemes; leaves alternate, sessile, like the last species of a strong but not unpleasant smell. June to October. Mexico. 1640. A.

\*\* *With leaves entire.*

4. *C. Scopa'ria.* *Flax-leaved Goosefoot, Belvidere or Summer Cypress.* "Leaves linear-lanceolate, flat,"



sessile, of a pleasant green; stem three feet high or more, upright, slender, clothed with short hairs, somewhat of a pyramidal form; flowers greenish, in small sessile clusters; an elegant plant, resembling a small cypress. June to September. Greece. 1629. A.

5. *C. Arista'tum*. *Bearded Goosefoot*. "Leaves lance-shaped, somewhat fleshy, very entire; corymbs two-forked, with axillary awns;" stem much branched, smooth, three to five inches high; leaves alternate, sessile, green or reddish; flowers small, greenish; a sessile flower in each fork of the stem. August. Virginia and Siberia. 1771. A.

Many species of this genus are natives of Britain, but are generally eradicated as weeds, as they abound in seeds, and are very exhausting to the soil.

LXXXVI. *BE'TA*, from the form of the Greek letter B, beta, which its capsule somewhat resembles when swelled with seed. Nat. ord. *Linn.* Holoraceæ. *Juss.* Atriplices. 4 Species.

1. *B. Vulga'ris*. *Red Garden Beet*. "Flowers heaped; leaflets of the calyx toothed at the base; lower leaves ovate," large, thick, succulent, deep red; roots large, crimson: the plant is subject to great varieties; with leaves less purple, or sometimes so dark as to be called Black Beet, sometimes even paler than in the next species, and the root of a deep yellow; flowers reddish green. August. South of Europe. 1548. B.



2. *B. Cicla*. *White Garden Beet*. "Flowers in threes; leaflets of the calyx without teeth;" leaves oblong, spear-shaped, thick and succulent, on broad foot-stalks; spikes of flowers greenish, axillary, long, with narrow leaves between the flowers; root white, seldom larger than a man's thumb: but a variety has of late been introduced under the name of *Mangel Wurzel*, or root of scarcity, whose roots, of a whitish red colour, weigh from ten to twenty pounds, and with leaves very large. This also varies with leaves dark green, light green, or red veined. August. Portugal. 1656. B.

3. *B. Maritima*. *Sea Beet*. "Flowers in pairs; stalks decumbent; calyx not toothed;" leaves oblique or vertical, ovate, sinuate; flowers in leafy racemes, green. July to September. Muddy sea shores, Britain. B.

Few plants are subject to more varieties than those of the genus *Beta*: by some the last species is thought to be the parent of all the rest. The first, or red Beet, is well known for its beautiful coloured root, used as a garnish for salads, and it is sometimes boiled and eaten cold. A good sugar may be obtained from the fresh roots. The leaves of *B. Cicla* are boiled and eaten as Spinach, or stewed in soups. *Mangel Wurzel* is cultivated for the use of cattle, with various success.

LXXXVII. *GOMPHRE'NA*, from γομφος, a nail or club, in allusion to its round head of flowers. Nat. ord. *Linn.* *Holoraceæ.* *Juss.* *Amaranthi.* 10 Species.



1. *G. Globo'sa. Annual Globe Amaranth.* "Stem upright; leaves lance egg-shaped; heads solitary; peduncles two leaved;" leaves sessile, hairy; heads of flowers at first round, afterwards oval, of two varieties, bright purple, or white and silvery, both extremely beautiful, and if gathered before they are too far advanced, will retain their beauty for several years. July to October. East Indies. 1714. A. Hot Ho.

LXXXVIII. *UL'MUS*, from *υλν*, a grove. Nat. ord. Linn. Scabridæ. Juss. Amentaceæ. 7 Species.

1. *U. Campes'tris. Common Elm.* "Leaves doubly serrate, ovate, rhomboid, rugged, unequal at the base; flowers nearly sessile, four-cleft; fruit oblong, naked;" a large high tree; timber valuable; the bark rough, cloven, on the branches corky; leaves rugged on both sides, woolly along the small veins; flowers numerous, brownish flesh-coloured; leaves sometimes striped or blotched. April. England. T.

Var. 1. *Minor or English Elm*, leaves narrower, tree much smaller.

2. *U. Subero'sa. Cork-barked or Dutch Elm.* "Leaves doubly serrate, somewhat unequal at the base; flowers nearly sessile, heaped, four stamened; fruit smooth; stem very rough; bark of the branches corky, winged;" leaves large and harsh; a quick growing tree, introduced by King William the Third; timber of inferior quality. April. Holland. 1690. T.



3. U. Monta'na. *Broad-leaved Elm, or Wych Hazel.* "Leaves doubly serrate, pointed, rough, unequal at the base; flowers in short stalks, five or six cleft, with five or six stamens; fruit roundish, naked;" tree large, spreading, not so tall as *Campestris*, with drooping pendulous branches; bark not corky; leaves larger than in the *Campestris*; the timber of about half the value. April. Britain. T.

4. U. Gla'bra. *Smooth-leaved Wych Elm.* "Leaves doubly serrate, smooth, unequal at the base; flowers nearly sessile, five-cleft, with five stamens; fruit obovate, deeply cloven;" an elegant tree, with spreading drooping branches; bark smooth and blackish; leaves quite smooth to the touch; the timber useful for naves of wheels. It has the height of the first species and its fruit, but it droops like the third. April. England. T.

5. U. America'na. *American Elm.* "Leaves acutely serrate, rough, unequal at the base;" flowers on longish stalks; fruit cloven, fringed; a tree in Canada growing to an immense height, distinguished from the European species by its leaves being simply serrate. April. North America. 1752. T.

Var. 1. *American Red Elm*, leaves ovate, large, of a lively green; branches red.

Var. 2. *American White Elm*, leaves narrower; branches white.

Var. 3. *American Drooping or Weeping Elm*, leaves rather smooth; branches pendulous.



6. *U. Nemoralis*. *Horn beam-leaved Elm*. "Leaves ovate, oblong, equally serrate, nearly smooth, nearly equal at the base, paler beneath; fruit inflated, oblique;" a tall and handsome tree; flowers nearly sessile, in tufts; calyx bell-shaped; of a genus somewhat doubtful. April. North America. 1760. T.

7. *U. Pu'mila*. *Dwarf Elm*. "Leaves oval, lance-shaped, equally serrate, very smooth, equal at the base;" a bushy shrub, with shining veiny leaves, smaller than any of the former species; flowers stalked, red; wood hard, close. In Russia growing to the size of the Oak Tree. April. Siberia. 1771. T.

The species of this well-known genus like many others much cultivated, are apt to intrude upon each other so much as to render it often a matter of difficulty to ascertain a particular specimen. *U. Campestris* does not produce prolific seeds in England, whence it has been thought not to be truly indigenous. It is often, as well as the American species, grafted upon a Wych Elm Stock, and is also propagated by suckers and layers.

LXXXIX. *PHYL'LIS*, from *φυλλον*, a leaf, the chief beauty of the plant being in its leaves. Nat. ord. *Linn.* *Stellatæ*. *Juss.* *Rubiaceæ*. 1 Species.

1. *P. No'bla*. *Bustard Hare's Ear*. Stem shrubby, two or three feet high, with round smooth leafy branches; leaves opposite, stalked, egg lance-shaped, entire, smooth, shining, two or three inches long;



panicle terminal, leafy, of numerous small green flowers. July. Canary Isles. 1690. S. Gr. Ho.

XC. ERYN'GIUM, from *ερυγω*, to belch, on account of its carminative qualities. Nat. ord. *Linn.* Umbellatæ. *Juss.* Umbelliferæ. 11 Species.

1. E. Aquaticum. *Marsh Eryngo*. "Leaves sword form, serrate, thorny; floral leaves undivided; stem simple;" leaves disposed round the root, a foot long; heads of flowers blueish white; the plant somewhat resembles a small pine apple plant. July to September. North America. 1699. P.

2. E. Platanum. *Flat-leaved Eryngo*. "Root-leaves oval, flat, crenate, stalked; heads peduncled;" stem divided at top into three branches, each producing a head of flowers, fenced with a six-leaved involucre; calyx green, with a silvery edge; flowers white or blueish. July to September. Germany. 1596. P.

3. E. Pusillum. *Dwarf Eryngo*. "Root-leaves oblong, gashed; stem forked; heads sitting;" stalks a foot high, repeatedly forked, having a head of flowers in each fork, which having little beauty are rarely cultivated. June to August. The Levant. 1759. P.

4. E. Maritimum. *Sea Eryngo, or Sea Holly*. "Root-leaves roundish, plaited, thorny; heads peduncled; chaff with three points;" root creeping and running deep into the ground; flowers at the end of



the branches in prickly heads of a whitish blue. Sea shores, Britain. July to October. P.

5. *E. Campestris*. *Field Eryngo*. "Root-leaves stem-clasping, lance-shaped, somewhat winged;" stem more branched and more green than the last; chaffs undivided; heads of flowers numerous; corolla white, yellow, or blue. July, August. England. P.

6. *E. Tricuspidatum*. *Trifid Eryngo*. "Root-leaves heart-shaped; stem-leaves palmate; side lobes bent back; chaff three thorned;" leaves with slender stalks; florets purple; involucre of narrow prickly leaflets, much longer than in *E. Maritimum*, by some writers thought to be only a variety of the next species. September. Spain. 1786. B.

7. *E. Amethystinum*. *Blue or Amethyst Eryngo*. "Root-leaves three-cleft, somewhat winged at the base;" stem about two feet high, with smaller and more divided leaves; upper part of the stem and the flowers of a fine blue. July, August. Styria. 1648. P.

8. *E. Alpium*. *Alpine Eryngo*. "Root-leaves heart-shaped; stem-leaves in threes, gashed; involucre fringed, pinnate, spiny;" corollas white; anthers green; the involucre beautiful, of an azure blue; heads of flowers elongated. July. Switzerland. 1597. P.

9. *E. Bourgaeti*. *Cut-leaved Eryngo*. "All the leaves alternate, and three parted, twice three-cleft; involucre awl-shaped, many leaved, somewhat spiny;"



stalks about two feet high, flowers light blue, in very large heads; peduncles strong, each supporting a single head of flowers. June to August. South of France. 1731. P.

This singular genus has the aspect and habit of a Thistle, the inflorescence is capitate, but the fructification is exactly that of an umbellate plant: the roots of *E. Maritimum* are sometimes candied, and are thought to be pectoral and restorative.

XCI. SANI'CULA, from *sano*, to heal, on account of its supposed vulnerary properties. Nat. ord. Umbellatæ. 3 Species.

1. *S. Europæa*. *Wood Sanicle*. "Radical leaves simple; flowers all sessile;" stem a foot and a half high; leaves stalked, smooth, seven lobed; flowers white, or flesh-coloured, the central ones male, outer perfect or female, whose petals are deciduous; herb bitter and aromatic. June, July. Britain. P.

2. *S. Canaden'sis*. *Canadian Sanicle*. "Radical leaves compound; leaflets ovate," scarcely different from the last, except in being sometimes ten times as large in all its parts. May to July. Canada, also in Japan. 1800. P.

3. *S. Marilandica*. *Maryland Sanicle*. "Central florets male, on stalks; florets of the ray perfect, sitting;" whole plant smooth; stem three forked; radical leaves on long stalks, in threes; stem-leaves



alternate; flowers greenish white. July. Maryland. 1765. P.

The virtues of *S. Europæa* were long celebrated for its power of healing wounds, by drinking it in a decoction; it has, however, quite lost its credit with regular practitioners, but the country people still cultivate it for this purpose.

XCH. ASTRANT'IA, from *αστρος*, a star, and *αντιος*, against. Nat. ord. Umbellatæ. 5 Species.

1. A. Ma'jor. *Great Black Master Wort*. "Leaves five-lobed; lobes three-cleft, serrate;" stem eighteen inches high, a little branched; leaves shining, stalked; umbels large; flowers whitish; involucre either purple or white. August. Alps of Europe. 1596. P.

2. A. Mi'nor. *Small Black Master Wort*. "Leaves digitate, serrate;" stem seldom a foot in height; leaves divided into eight segments, deeply serrate; foot-stalks long; involucre always white; petals whitish. June. Alps of Switzerland. 1686. P.

These plants, though long ago introduced, having but little beauty are seldom seen unless in botanic gardens.

XCI. HERA'CLEUM, from Hercules, the plant being sacred to him. Nat. ord. Umbellatæ. 10 Species.

1. H. Sphondylium. *Common Cow Parsnep*. "Leaves pinnate; leaflets wing-cleft, cut, serrated;"



stem four feet high; flowers large, radiate, white or reddish. July. Britain. P.

2. *H. Angustifolium*. *Narrow-leaved Cow Parsnep*. "Leaves cross-wise, pinnate; leaflets linear;" florets generally uniform, different from the former, of which perhaps it is only a variety by the length and narrowness of its leaflets. July. Britain. P.

3. *H. Sibīricum*. *Siberian Cow Parsnep*. "Leaves winged; leaflets in fives, the middle ones sessile; flowers uniform;" stem deeply furrowed, hairy; petals green, bent in; at the base of the leaf-sheaf a thick white beard. May to July. Siberia. 1768. P.

4. *H. Pana'ces*. *Palmated Cow Parsnep*. "Leaves winged; leaflets in fives, middle ones sitting; flowers radiate;" stem six feet in height; leaves on long channeled stalks, tinged with purple; flowers large, greenish yellow. July. Italy. 1597. B.

5. *H. Austrīacum*. *Austrian Cow Parsnep*. "Leaves winged, wrinkled and rough on both sides; flowers somewhat radiate;" stem from one to two feet, smooth, scored, soft; petals reddish white, deeply cut. July. Austria. 1752. P.

6. *H. Alpīnum*. *Alpine Cow Parsley*. "Leaves simple, heart-shaped, scarcely lobed, serrate; flowers radiate;" leaves smooth, thick, on long pedicles; stem from two to three feet, round, smooth; corolla white, smaller than in the rest. July. The Alps, 1739. P.



Some of the species of this genus are amongst the tallest of the umbellate tribe. The Russians distil an ardent spirit from the stalks, first fermenting them in water with the greater Bilberries, and which is said to possess an agreeable flavour.

XCIV. DAU'CUS, from *daio*, to heat, on account of the warm pungent taste of its seeds. Nat. ord. Umbellatæ. 6 Species.

1. D. Caro'ta. *Wild Carrot, or Bird's-nest.* "Seeds hispid; foot-stalks of the leaves nerved beneath;" stem upright, grooved, hairy; leaves trebly winged; flowers white, those in the middle sometimes tinged with purple. The cultivated Carrot is a variety of this, with a larger and softer root, and a taller stem; umbel, when in seed, concave. June, July. Britain. P.

2. D. Maurita'nicus. *Fine-leaved Carrot.* "Seeds hispid, central; florets barren, fleshy; common receptacle hemispherical;" stalk channeled, terminated by large umbels; the segments of the lower leaves are cut into other segments; deep green; petals white, bent in, cloven. July. Spain. 1768. B.

3. D. Visna'ga. *Spanish Carrot, or Pick-tooth.* "Seeds glossy, universal umbel conjoined at the base;" leaves smooth, divided into many narrow segments, like those of fennel; flowers equal, perfect; petals two-lobed, bent in, white; anthers purplish; the rays, which sustain the umbellet, being long and



stiff, serve the Spaniards for tooth-picks; they are also, when chewed, of an aromatic flavour. July. South of Europe. 1597. A.

4. *D. Gingi'dium*. *Shining-leaved Carrot*. "Rays of the involucre flat; segments recurved;" stalks smoother than the common Carrot; segments of the leaves broader, of a lucid green; umbels larger, not so regular. July. South of France. 1722. A.

5. *D. Murica'tus*. *Prickly-seeded Carrot*. "Seeds with three barbed prickles;" leaves doubly pinnate, hairy; flowers radiate, white. *D. Maritimus*, a native of Britain, seems to be a variety of this. July. Barbary. 1699. B.

The cultivated Carrot of the first species has been long introduced for culinary uses, but its application to the purpose of feeding cattle is of more recent date: its roots vary in colour from a pale yellow to a deep orange, and some have been seen of a purplish hue. It is said that a very good spirit may be obtained from it by distillation.

XCV. *TORDY'LIUM*, from *τορνος*, a turning lathe, and *ελυνω*, to turn, the seed appearing as if turned. Nat. ord. Umbellatæ. 6 Species.

1. *T. Syria'cum*. *Syrian Hart-wort*. "Involucres longer than the umbel;" herb hoary, with short close hairs; leaves pinnate, of one or two wings with an odd leaflet; flowers few, white, small; leaves of the involucrellum larger than those of the involucre. July. Syria. 1597. A.



2. *T. Officinale*. *Officinal Hart-wort*. "Partial involucre the length of the flowers;" stem downy; leaves unequally pinnate; radical ones on long foot-stalks, with leaflets ovate, gashed, crenate, the end leaflet very large; stem-leaves nearly sessile; flowers flesh-coloured, the two outer petals very large. July. England. A.

3. *T. A'pulum*. *Smaller Hart-wort*. "Partial involucre shorter than the flowers;" leaves pinnate; leaflets about seven, roundish; stems shaggy, with long white hairs; flowers white, with one large petal in the ray. August. Apulia. 1739. A.

4. *T. Maximum*. *Great Hart-wort*. "Umbels crowded, radiate; stem rough, with deflexed bristles;" lower leaves unequally pinnate, rough, with five ovate gashed, notched leaflets; upper leaves of three leaflets; flowers small, reddish, with unequal petals. July. England. A.

*T. Officinale* was formerly cultivated for the sake of its seeds, which were supposed to promote the various secretions of the body, but are now out of use.

XCVI. CAU'CALIS, or *δαυκαλις*, a little Carrot, by changing the first letter. Nat. ord. Umbellatæ. 13 Species.

1. *C. Grandifl'ra*. *Great-flowered Bur Parsley*. "Umbels flat; exterior petals of the corolla very large; involucre five-leaved, one leaf double the size of the rest;" leaves twice or thrice winged, finely



cut, pale green, slightly woolly; flowers white; leaves of the involucre membranous. July. South of Europe. 1648. A.

2. *C. Latifolia. Broad-leaved Bur Parsley.* "General umbel three-cleft, involucred; partial umbels with five fertile flowers; leaves pinnate, serrated;" stem three feet high, branchy, rough with bristles; flower-stalks very long; partial umbels nearly sessile; flowers red. July. England. A.

3. *C. Pu'mila. Dwarf Bur Parsley.* "Stem low, pubescent; segments of the leaves rather obtuse; umbels involucred; fruit egg-shaped, thick, beset with yellowish prickles:" it varies in the number of the leaves of the involucre; leaves woolly, yellowish green, twice winged; flowers reddish. August. Barbary. 1640. A.

4. *C. Orienta'lis. Oriental Bur Parsley.* "Umbels spreading; leaves thrice winged; leaflets finely cut, last divisions linear;" stem from two to three feet high, a little branched; umbels loose, large, from twelve to fifteen rays; bristles of the seeds terminated by a gland. July. The Levant. 1699. B.

5. *C. Leptophylla. Fine-leaved Bur Parsley.* "Leaves thrice winged, very slender; umbels three cleft, without an involucre; small umbels three leaved, three seeded;" leaves triangular, very finely cut; segments short; umbel three to five rayed; flowers purplish white; seeds large, rough, with long points. August. Europe. 1739. A.



These plants are seldom cultivated unless in botanic gardens. The rest of our native species are common weeds.

xcvii. CORIAN'DRUM, from κορις, a bug, the leaves, when bruised, smelling like that insect. Nat. ord. Umbellatæ. 2 Species.

1. C. Sativum. *Common Coriander*. "Seed globular;" stem eighteen inches high, smooth, branched; root-leaves doubly pinnate; leaflets broad, gashed; upper leaves doubly pinnate, finely divided; flowers reddish white; petals of the ray large. June. England. A.

2. C. Testiculatum. *Small Coriander*. "Seed double;" stem angular, branched; leaves once or twice pinnate; leaflets cut into narrow segments; umbels small, often simple; flowers whitish; anthers purplish; scent stronger than in the former. June, July. South of Europe. 1739. A.

The leaves of these plants have a strong disagreeable scent, the seeds are grateful to the taste, and encrusted with sugar, are sold by the confectioners; large quantities also are used by distillers.

xcviii. LASERPITUM, of uncertain derivation; it has been suggested as from *lacti-pitium*, because its milky juice has a pitchy smell. Nat. ord. Umbellatæ. 23 Species.

1. L. Latifolium. *Broad-leaved Laserwort*. "Leaves



twice pinnate ; leaflets heart-shaped, gashed, serrate ;" stem round, smooth, varying in height in different situations ; umbels large, broad, flat ; petals white, small, bent in. June, July. South of Europe. 1640. P.

2. *L. Trilobum.* *Columbine-leaved Laser-wort.* " Leaves compound ; leaflets broad, ovate, three lobed, sharply serrate ;" umbel large, spreading, with long purple rays ; flowers small, white : a variety with leaves less lobed, is esteemed by some botanists a different species, under the name of *L. Aquilegifolium*. May to July. The Levant. 1640. P.

3. *L. Gallicum.* *French Laser-wort.* " Leaves doubly pinnate ; leaflets wedge form, three-cleft ; segments oblong, with callous points at the end ;" stem not much branched, having two or three leaves only at the lower part, at the top two very large umbels. June, July. South of Europe. 1683. P.

4. *L. Angustifolium.* *Narrow-leaved Laser-wort.* " Leaves compound ; leaflets lanceolate, obtuse, pointed, entire, sessile ;" foot-stalks of the leaves hairy ; flowers white ; seeds winged, curled. June, July. South of Europe. 1683. P.

5. *L. Siler.* *Mountain Laser-wort.* " Leaves compound ; leaflets oval, lanceolate, entire, stalked ;" stem varying from one to six feet ; petals white ; anthers white ; seeds aromatic, bitter. May to July. Austria. 1640. P.

6. *L. Lucidum.* *Shining Laser-wort.* " Leaves



more than doubly compound; leaflets linear, awl-shaped, smooth; general involucre pinnate;" leaves firm, smooth, shining; umbel very close, globular; flowers often purple; seeds large, almost black. July. Switzerland. 1775. B.

7. *L. Ferula'ceum.* *Fennel-leaved Laser-wort.* "Leaves more than doubly compound; leaflets linear;" leaves five times pinnate, narrow, smooth, lax; seeds winged; flowers whitish. June. The Levant. 1768. P.

The species of *Laserpitium* are in general of a larger proportion, and with more ample foliage than the rest of the umbellate tribe; they are preserved chiefly in botanic gardens, having no great beauty; if wounded they exude a very acrid juice, which turns to a gummy substance, formerly used in medicine.

XCIX. *PEUCE'DANUM*, from *πεύκε*, the pine tree, and *δαίος*, dry; its strong resinous odour, smelling like pitch. Nat. ord. Umbellatæ. 11 Species.

1. *P. Officina'le.* *Common Sulphur Wort.* "Leaves five times three parted; segments linear, undivided;" umbels large, rather concave, pale yellow; flowers very numerous. May to July. England. P.

2. *P. Sila'us.* *Meadow Sulphur Wort.* "Leaves compound; leaflets wing-cleft; segments opposite; general involucre two-leaved;" stem and leaves dark green, smooth, foetid when bruised; flowers whitish-green. June to August. England. P.



3. *P. Alsaticum*. *Small-headed Sulphur Wort*.  
 "Leaves compound; leaflets wing-cleft, their segments three-cleft, rather obtuse;" stem tinged with red, forked; umbels very copious, small, yellowish. July. Austria. 1774. P.

The plants of this genus, like the former, when wounded, exude a viscid juice, which hardens into a gummy substance, retaining a strong odour.

C. AMMI, αμμος, sand; from its small seeds.  
 Nat. ord. Umbellatæ. 4 Species.

1. *A. Majus*. *Bishop's Weed*. "Lower leaves pinnate, lance-shaped, serrate; upper ones many cleft, linear;" plant glaucous; flowers whitish; seeds two, convex and streaked on one side, flat on the other; slightly aromatic; they yield an oil in distillation, which was formerly esteemed in medicine. July. South of Europe. 1596. A.

2. *A. Copiticum*. *Prickly-seeded Bishop's Weed*.  
 "Leaves more than doubly compound; segments linear; seeds prickly;" umbels with ten rays, not large; corollas white, equal; seeds aromatic. July. Egypt. 1773. A

CI. BU'NIUM, from βουνος, a hill; it loving a dry soil. Nat. ord. Umbellatæ. 3 Species.

1. *B. Bulbocastanum*. *Great Earth Nut*. "Involute many leaved; stem straight and leafy at the base;" root tuberous, roundish; stem branched,



scored; leaves tri-pinnate; segments linear, ten, three-cleft; umbels close, white; involucre three times shorter than the rays. June. Britain. P.

2. *B. Flexuosum*. *Common Earth Nut, Pig Nut, or Kipper*. "Involucre of three leaves or less; stem naked, tapering, zig-zag at the base;" root tuberous; stem elongated under the earth; radical leaves on long stalks, tri-pinnate; stem leaves nearly sessile, finely divided; flowers white. June. Britain. P.

These plants are rarely cultivated in gardens, but the tuberous roots have long been a favourite esculent with boys, having somewhat the flavour of chesnuts.

CII. *SELINUM*, from σελή, mud; it growing in muddy places. Nat. ord. Umbellatæ. 9 Species.

1. *S. Palustre*. *Marsh Milk Parsley*. "Stem scored, root nearly simple; rays of the umbel hispid;" stem solitary, erect hollow, leafy; purple at the base; leaves alternate, twice or thrice pinnate; umbels large, flowers white, on pale purplish foot-stalks; plant abounding with a white bitter foetid juice. July. England. P.

2. *S. Austriacum*. *Austrian Selinum*. "Stem furrowed; leaves of the involucre wedge-shaped, much divided;" root containing a yellowish milk; radical leaf, divided by a round foot-stalk into three branches, which are again subdivided; leaves dark green above, paler beneath; flowers yellowish white. July. Austria. 1787. P.



3. *S. Caruifolia*. *Carraway-leaved Selinum*. "Stem furrowed, acutely angular; general involucre none; leaves tri-pinnate; leaflets lanceolate cut, callous and pointed at the top;" stem about three feet, pale green; flowers white, with a tinge of red on the under side. August. Siberia. 1774. P.

4. *S. Chabræi*. *Carrot-leaved Selinum*. "Stem round, scored; general involucre none; sheaths of the leaves loose; leaves pinnate, leaflets linear;" stems a foot high; flowers white, slightly purplish on the outside; umbels smaller than in the last species. August. Switzerland. 1791. P.

5. *S. Seguiéri*. *Fennel-leaved Selinum*. "Stem nearly round, furrowed; general involucre none; leaves three-cleft, linear pointed;" stem about four feet high, branches opposite; leaves opposite, spreading; flowers white; the general umbel large and handsome. July. Italy. 1774. P.

6. *S. Monniéri*. *Annual Selinum*. "Umbels crowded together; general involucre reflexed; seeds with five membranous ribs;" stem erect, from two to three feet, purplish, streaked; leaves smooth, twice pinnate; flowers greyish white, forming a close umbel. August. South of France. 1771. A.

CIII. ATHAMAN'TA, from Athamas, a mountain in Thessaly. Nat. ord. Umbellatæ. 11 Species.

1. *A. Libano'tis*. *Mountain Spignel, or Stone Parsley*. "Leaves twice winged, flat; umbel hemis-



spherical, seeds hirsute;" flowers white, small, uniform; styles purple; leaflets sessile. June to August. England. P.

2. *A. Cervaria*. *Broad-leaved Spiguel*. "Leaves pinnate, in cross pairs; gash-angled; seeds naked;" leaves with six pair of wings, sessile, with black veins beneath; corolla white, with a purple outside; anthers white; an ill-defined Species. *A. Sibirica* is probably only a variety of this. July, August. Germany. 1597. P.

3. *A. Condensata*. *Close-headed Spiguel*. "Leaves mostly doubly pinnate; leaflets tiled downwards; umbel lens-form," close, reddish before flowering; petals white; anthers brown; stem a foot high. July to September. Siberia. 1773. P.

4. *A. Oreoselinum*. *Bending stalked Spiguel*. "Leaves thrice pinnate; leaflets divaricate, or straddling;" stem two feet high; petals white, with a blush of rose-colour; leaves large, divided at right angles; plant gratefully aromatic. July. Germany. 1768. P.

5. *A. Si'cula*. *Flix-weed Spiguel*. "Lower leaves shining; primary umbels, somewhat sessile; seeds hairy;" umbels at their first appearance very compact, afterwards spreading open and dividing into several small umbels; flowers white. June, July. Sicily. 1713. P.

6. *A. Cretensis*. *Cretan Spiguel, or Candy Carrot*. "Leaves compound; leaflets linear, flat, hir-



sute; petals two-parted; seeds oblong, hirsute;" plant in its wild state, woolly, when cultivated shining, brittle, succulent; petals white. An annual species *A. Annua* is thought to be only a variety of this. June. South of Europe. 1596. P.

These plants were formerly much cultivated, as the seeds were supposed useful in calculous disorders; they have lost their credit, however, with modern practitioners.

CIV. BUPLEURUM, βους, an ox, and πλευρον, the side; from a supposed quality of bursting cattle. Nat. ord. Umbellatæ. 24 Species.

1. *B. Rotundifolium*. *Round-leaved Hare's Ear, or Thorough Wax*. "General involucre none; leaves perfoliate;" stem erect, leafy; leaves somewhat glaucous; umbels about six or seven rayed; little umbels of about eight yellow flowers. June. July. England. A.

2. *B. Stellatum*. *Starry Hare's Ear*. "Leaves of the partial involucre united; general involucre of three leaves;" root leaves very long, grass-like; partial involucre basin-like, in which the yellow flowers are lodged. May to July. Switzerland. 1775. P.

3. *B. Petraeum*. *Rock Hare's Ear*. "Leaves of the partial involucre united; general involucre of five leaves;" root leaves numerous, grass-like; stem leaves heart-shaped, lanceolate, embracing the stem; flowers yellow. July. Switzerland. 1768. P.



4. B. Angulo'sum. *Angular-leaved Hare's Ear*.  
"Partial involucre, with five distinct leaves, roundish; general involucre three-leaved, egg-shaped; leaves stem-clasping, heart egg-shaped;" flowers yellow; nearly allied to No. 2, but somewhat larger. July. The Pyrenees. 1759. P.

5. B. Longifo'lium. *Long-leaved Hare's Ear*.  
"Partial involucre of five leaves egg-shaped; general involucre of five leaves, embracing the stem;" root leaves narrowed into a foot-stalk at their base, broad towards their summit; flowers yellow; it resembles No. 1, but its leaves are longer, and the root perennial. May to July. Germany. 1713. P.

6. B. Falca'tum. *Twisted stalked Hare's Ear*.  
"Partial involucre, five-leaved, acute; general involucre five-leaved, lanceolate; stem zig-zag;" leaves sickle-shaped; next the root on long foot-stalks; flowers small, deep yellow. May to September. Germany. 1739. P.

7. B. Odonti'tes. *Narrow-leaved Hare's Ear*.  
"Partial involucre five-leaved, acute; general involucre three-leaved; central floret highest; branches straddling;" leaves linear, lanceolate, sessile; flowers yellow. June to August. Switzerland. 1749. A.

8. B. Semi-compo'situm. *Dwarf Hare's Ear*.  
"Umbels, both compound and simple;" stem a span high; leaves lanceolate; flowers purplish white; the partial umbel, besides the usual umbelliferous stalks,



has also several simple stalks, bearing one flower. July, August. Spain. 1778. A.

9. B. *Tenuis'simum*. *Least Hare's Ear*. "Umbels simple, alternate; involucre five-leaved, mostly three-flowered;" leaves lanceolate, alternate; stem slender; umbels axillary, nearly sessile; flowers yellow. July, August. England. A.

10. B. *Jun'ceum*. *Linear-leaved Hare's Ear*. "Stem erect, panicled, leaves linear; general involucre, three-leaved; partial involucre five-leaved;" stem two or three feet high, rush-like; lateral umbels, simple, of one or two flowers; leaves grassy; flowers yellow. July, August. Italy. 1722. A.

11. B. *Frutico'sum*. *Common Shrubby Hare's Ear, or Shrubby Ethiopian Hart-wort*. "Stem shrubby; leaves egg lance-shaped, entire, sitting," alternate, leathery, glaucous; umbels terminal; flowers at first yellow, fading to a brown; a bushy evergreen shrub. July, August. The Levant. 1596. E. S.

The Bupleurums are seldom cultivated, unless in botanic gardens. The name of thorough wax is derived from the stalk in the first species *waxing*, or growing through the leaves.

CV. ECHINO'PHORA, *ἐχίνοψ*, a hedge-hog, and *φῆμα*, to bear; alluding to its prickly heads of flowers and seeds. Nat. ord. Umbellatæ. 2 Species.

1. E. *Spino'sa*. *Prickly Samphire, or Sea Parsnep*. "Leaflets awl-shaped, spinous, three-cleft, or



undivided, entire;" root top-shaped, whitish, eatable, resembling a parsnep; stem repeatedly branched, and armed with such a multitude of spinous leaves, as to form an inaccessible bush; umbels white, or reddish, large; said to have been found in England. July. P.

2. *E. Tennifo'lia*. *Fine-leaved Sea Parsnep*. "Leaflets wing-cleft, sinuate, flat, scarcely spinous;" stem much branched, downy; umbels numerous, of a dull yellow. July, August. Apulia. 1731. P.

CVI. *SI'UM*, from *σινω*, to shake; because agitated by the stream in which it grows. Nat. ord. Umbellatæ. 18 Species.

1. *S. Si'sarum*. *Skirret*. "Leaves pinnate; upper leaves in threes; all sharply serrate; umbels terminal;" root fleshy, oblong, tuberous; stalk a foot high, terminated by an umbel of white flowers; seeds scored. July. China. 1597. P.

2. *S. Rigi'dius*. *Virginian Water Parsnep*. "Leaves pinnate; leaflets lanceolate, mostly entire;" roots resembling the last; umbels much longer; flowers small, whitish. July. August. Virginia. 1774. P.

3. *S. Falca'ria*. *Decurrent Water Parsnep*. "Leaves linear, running along the stem; connate, finely serrated;" root long, cylindrical, white, like eryngo; stem terminating in numerous slender umbels, of many rays, with small white flowers. July. August. Europe. 1759. P.



4. *S. Si'culum*. *Sicilian Water Parsnep*. "Radical leaves, in threes; stem leaves twice pinnate;" stem branched, leafy, about two feet high, round, solid, smooth; flowers yellow; in some of the partial umbels very few. July, August. Sicily. 1686. P.

Skirret was formerly much cultivated for the sake of its roots, which were thought highly restorative; they were eaten boiled and strewed with butter, pepper, and salt, or rolled in flour and fried; or else being first boiled, they were eaten cold with oil and vinegar. The Chinese have imposed upon merchants by selling these roots as the true *Ginseng*, *Panax Quinquifolia*. The native species of this genus are weeds, common on ditch banks.

CVII. HASSELQUISTIA, in honour of Frederick Hasselquist, a pupil of Linnæus, the discoverer of this genus. He travelled into Palestine, for the purpose of illustrating the plants mentioned in Scripture. Nat. ord. Umbellatæ. 2 Species.

1. *H. Ægypti'aca*. *Egyptian Hasselquistia*. "Leaves pinnate; leaflets wing-cleft, cut;" stem erect, branched, leafy, rough, with deflexed hairs; leaves light green, in three or four pairs; umbels terminal, broad; flowers white. July. Egypt. 1768. A.

2. *H. Corda'ta*. *Heart-leaved Hasselquistia*. "Leaves heart-shaped, crenate, simple, or in threes;" plant pale green; flowers white, in more compact umbels than the former. July. Native country unknown. 1787. A.



These plants being of tender growth, are very rarely met with.

CVIII. CUMI'NUM, from *κωμ*, to be pregnant; on account of its great fertility. Nat. ord. Umbellatæ. 1 Species.

1. *C. Cymi'num*. *Cumin*. Stem six inches high, leafy, branched; leaves finely cut, like those of fennel; flowers small, white, or purplish; seed aromatic, with nine furrows on the convex side. June, July. Egypt. 1594. A.

This plant is much cultivated in the south of Europe for its seeds, which are esteemed highly stomachic. The Dutch are said to put them into their cheese, and the Germans into their bread. It is the plant of which the Pharisees gave tythe.

CIX. FE'RULA, either from *fero*, to bear, because used for walking-sticks; or from *ferio*, to strike, because used to chastise school-boys. Nat. ord. Umbellatæ. 12 Species.

1. *F. Commu'nis*. *Common Fennel Giant*. "Leaves compound; leaflets linear, very long, simple;" stem rising from ten to twelve feet, with many joints, terminated by large umbels of yellow flowers; lower leaves spreading two feet. June, July. South of Europe. 1597. P.

2. *F. Glau'ca*. *Glaucous Fennel Giant*. "Leaves more than doubly compound; leaflets lanceolate, li-



near, flat," gray, glaucous; stem three to four feet high, terminated by an umbel of yellow flowers. July. South of Europe. 1768. P.

3. *F. Tingita'na. Tangier Fennel Giant.* "Leaves compound; leaflets jagged; segments three-toothed, unequal, shining;" leaves large, spreading near the root, subdivided into many parts; stems eight or ten feet high, terminated by large umbels of yellow flowers. July. Barbary. 1683. P.

4. *F. Orientalis. Narrow-leaved Fennel Giant.* "Segments of the leaves naked at the base; leaflets bristle-shaped;" stem seldom more than three feet high; umbel of flowers, and seed small. August. The Levant. 1759. P.

5. *F. Nodiflo'ra. Knotted Fennel Giant.* "Leaves compound; leaflets with appendages at their base; umbels rather sitting;" stem about three feet high; leaves much divided; from each joint of the stem come out four umbels, on stalks; flowers yellow. August. South of Europe. 1759. P.

6. *F. Persica. Persian Fennel Giant,* "Leaves more than doubly compound; leaflets many cleft; acute, decurrent; primary umbel sessile;" leaves rather glaucous; flowers deep yellow. August. Persia. 1777. P.

This genus contains the loftiest of the umbellate tribe, its stems, though annual, acquire a woody hardness. In the first species, the stem, when dry, contains a light pith, which is used for tinder, and explains the story of



Prometheus conveying the fire from heaven in a ferula. The last species, *F. Persica*, was sent to Europe as the plant which produces the genuine asafœtida; when wounded it exudes a viscid juice, which hardens into a gum, smelling altogether like that substance: but the leaves are unlike those of the plant described by Kœmpfer, which makes the matter somewhat doubtful. This most valuable of the foetid gums, is the concrete juice of the root of a particular species growing in Persia.

CX. CRITH'MUM, from κριθή, barley; on account of its striped and oval seeds. Nat. ord. Umbellatæ. 2 Species.

1. *C. Maritimum*. *Sea Samphire*. "Leaves thrice ternate; leaflets lanceolate, fleshy;" stems a foot high, hard, branched; flowers in dense umbels, greenish white. July to September. England. P.

This plant is a native of rocky wastes in Europe; on the continent the leaves pickled in vinegar are in frequent use; but in England the more common *Salicornia* has usurped its place and name, though an inferior substitute, and without its aromatic flavour. It is still found on Dover cliffs, in the same situation as described in the well known passage of Shakspeare.

CXI. BU'BON, from βούβων, a tumour; which these plants were supposed to cure. Nat. ord. Umbellatæ. 5 Species.

1. *B. Rigi'dius*. *Stiff-leaved Bubon*. "Leaves compound; leaflets linear, stiff and short;" flower



stalks, a foot high, terminated by a loose umbel of small yellowish white flowers. June to August. Sicily. 1710. P.

2. *B. Galbanum*. *Lovage-leaved Bubon*. "Leaves twice pinnate; leaflets oval; wedge-shaped;" acute, finely serrated; umbels few; seeds smooth; stems shrubby, glaucous; an evergreen shrub, eight to ten feet high, glaucous; flowers small, greenish yellow. August. Cape of Good Hope. 1596. E. S. Gr. Ho.

The latter plant, and perhaps some others of this genus, furnish the Gum Galbanum of the shops, which is the inspissated juice of the stem exuding when wounded.

CXII. CA'CHRYΣ, καχρυς, roasted barley, which the seed was thought to resemble. Nat. ord. Umbellatæ. 7 Species.

1. *C. Libano'tis*. *Smooth seeded Cachrys*. "Leaves twice pinnate; leaflets acute, much divided; seeds furrowed, smooth;" stem round, scored, leafy, two feet high; umbels large; flowers yellow; whole plant of an aromatic sweet smell. August. Sicily. 1570. P.

2. *C. Si'cula*. *Hairy seeded Cachrys*. "Leaves many times divided; leaflets linear, acute; seeds furrowed, hispid;" upper leaves opposite; terminating umbel sessile, other umbels pedicled; flowers yellow. August. Spain, Sicily. 1739. P.

CXIII. LIGUS'TICUM, from Liguria, in Italy, its native country. Nat. ord. Umbellatæ. 13 Species.



1. *L. Levis'ticum*. *Common Lovage*. "Leaves repeatedly compound; leaflets wedge-shaped at their base, unequally cut in the fore part;" umbels many together; stem about five feet high, glaucous, acrid, aromatic; flowers small, yellowish. June. Alps of Italy. 1596. P.

2. *L. Sco'ticum*. *Scotch Lovage*. "Leaves twice ternate; deeply serrated;" plant of humbler growth than the former; leaves broader, rounder; umbels fewer, white, with a reddish tinge. June to August. Britain. P.

3. *L. Peloponen'se*. *Hemlock-leaved Lovage*. "Leaves repeatedly pinnate; leaflets lanceolate, decurrent, taper pointed, cut;" leaves very large, shining green; umbels white, some very large. May, July. Alps of Switzerland. 1596. P.

4. *L. Austri'acum*. *Austrian Lovage*. "Leaves twice pinnate; leaflets wedge-shaped, decurrent, cut;" umbels leafy, much like the last; stem stouter; umbels larger and more leafy; flowers white, strongly smelling. June to August. Austria. 1759. P.

5. *L. Cornubien'se*. *Cornish Lovage*. "Radical leaves twice compound, wedge-shaped, cut; stem leaves ternate or simple, lanceolate and entire;" known from the rest by its compound leaves being all radical; umbels few, solitary; flowers white. July. England. P.

6. *L. Peregri'num*. *Parsley-leaved Lovage*. "Leaves repeatedly compound; leaflets three-cleft, wedge-



shaped, cut;" umbel terminal; involucre of the primary umbel scarcely any; flowers yellow, anthers white. It resembles Parsley both in smell and taste, but all its parts are thicker, and more rigid. July. Portugal. 1776. B.

7. L. Méum. *Bristle-leaved Lovage, Spignel, Men, Baldmoney.* "Leaflets all in numerous, deep, bristle-like segments;" flowers whitish-pink; root aromatic; an infusion of which is said to give cheese the flavour of the Swiss Chapziegar. May. Britain. P.

This plant, by some writers, is arranged as an *Æthusa*, by others as an *Athamanta*, and again as making a genus by itself under the name of *Meum*.

L. *Levisticum* abounds, especially the root, which is less ungrateful than the leaves, with a yellowish foetid gum resin, formerly thought highly useful in removing obstructions.

CXIV. ANGELICA, from the angelic, or supposed super-excellent qualities of the root and seeds. Nat. ord. Umbellatæ. 6 Species.

1. A. Archangelica. *Garden Angelica.* "Leaves pinnate; odd leaflet lobed;" stem about five feet high, hollow, furrowed; sheath of the leaves membranous, swelling; umbels globose, many rayed, whitish-green. June to August. England. B.

2. A. Sylvestris. *Wild Angelica.* "Leaves twice pinnate; leaflets equal;" umbels many rayed; hemispherical; petals white, tinged with red. July. Britain. P.



plish at the base; radical leaves in threes and fives; stem leaves pinnate; seed smooth, larger than coriander; corolla whitish. July. Portugal. 1710. B.

These plants, like so many others of the umbellate tribe, are preserved only in the gardens of the curious; one of our native species, the *O. Crocata*, is extremely virulent and poisonous, and therefore justly causes the rest to be suspected.

CXVII. SCAN'DIX, from *σκιν*, to prick; on account of the sharp point of the seeds. Nat. ord. Umbellatæ. 11 Species.

1. *S. Odora'ta*. *Sweet Cicely, or Great Chervil*. "Seeds furrowed with sharp angles;" leaves large, triply pinnate, serrate; flowers small, copious, pure white, in large umbels; herb fragrant, resembling hawthorn blossoms. June. Britain. P.

2. *S. Cerefo'lium*. *Garden Chervil*. "Seeds shining, ovate, awl-shaped; umbels sessile, lateral;" leaves triply pinnate, delicate, smooth; stem two feet high; umbels small, of white flowers; herb sweet scented, pale green. June. South of Europe. 1597. A.

The seeds of the first species are agreeably aromatic; the leaves of the second are much used in France for soups and salads. The rest of the species of *Scandix* are weeds; the leaves of one of them, *S. Anthriscus*, eaten by mistake for Chervil, proved highly poisonous. This genus is nearly allied to the next.



CXVIII. CHÆROPHYL'LUM, from χαίρων, rejoicing, and φυλλον, a leaf, alluding to the luxuriancy of the leaves. Nat. ord. Umbellatæ. 11 Species.

1. C. Bulbo'sum. *Bulbous rooted Chærophyl'ium, or Cow Parsley.* "Stem polished, swelled at the joints, hairy at the base;" stem six feet high, marked with reddish brown spots; leaves triply pinnate; umbels small, flowers white. July. Europe. 1726. B.

2. C. Hirsu'tum. *Hairy-leaved Chærophyl'ium.* "Stem equal; leaves tri-pinnate; leaflets gashed, acute; fruit two-awned;" stems round, rough, with stiff hairs; umbel convex; flowers white, not radiate. July. Switzerland. 1759. P.

3. C. Aromá'ticum. *Aromatic Chærophyl'ium.* "Stem equal; leaves twice pinnate; leaflets heart-shape, serrate, entire; seed two awned;" stem about two feet high, reddish; flowers white, small, not radiate; involucellums, lanceolate, reflexed. June to August. Germany. 1726. P.

4. C. Au'reum. *Golden Chærophyl'ium.* "Stem equal; leaflets gashed; seeds coloured, furrowed, awnless;" stem two or three feet high, angular, spotted; leaves twice pinnate, pale; flowers white, reddish outside; seeds yellow. July. Germany. 1570. P.

We have two native species which are common weeds; the above species are scarcely to be found out of botanic gardens, as they are not either in medicinal or culinary use.



CXIX. IMPERATO'RIA. So named from its supposed imperial virtues in medicine. Nat. ord. Umbellatæ. 1 Species.

1. I. Ostru'thium. *Master Wort*. Stem erect, about a foot and a half high; leaves twice ternate, cut, serrate; umbels terminal, of many rays, flattish; flowers white, or blush-colour. May to July. Scotland. P.

The root of this plant is somewhat aromatic; a description of its virtues may serve also for many other plants of the umbellate tribe. "It is," says old Gerarde, in his Herbal, 1597, "also singular against all corrupt and naughty aire, and infection of the pestilence; cures pestilential carbuncles and blotches, cold fits of agues, dropsy, dissolves all ventosities or windinesse of the stomache and other parts, and greatly helpeth such as have taken greatsquats, bruises, or falls from some high place."

CXX. PHELLAN'DRIUM, φελλος a cork, and ανδρειον, male; why so termed it is not easy to ascertain. Nat. ord. Umbellatæ. 2 Species.

1. P. Aqua'ticum. *Common Water Hemlock*. "Stem leafy; subdivisions of the leaflets divaricate, or straddling, bluntish;" stem two or three feet high, hollow, furrowed, with wide spreading branches; leaves thrice pinnate, spreading, dark, shining; flowers purplish white; when the plants happen to grow out of the water, the leaves are rounder, and less divided. July. Britain. B.

2. P. Mutelli'na. *Alpine Phellandrium*. "Stem



almost naked; leaves twice pinnate;" stem about a foot high; subdivisions of the leaves close, acute; umbels terminal, reddish. July. The Alps. 1774. P.

CXXI. CICU'TA, means the internode, or space between the joints of a reed, or musical pipe; the hollow stems of several plants of the umbellate tribe, were employed by shepherds to form that instrument. Nat. ord. Umbellatæ. 3 Species.

1. C. Viro'sa. *Long-leaved Water Hemlock*. "Umbels opposite the leaves; leaf-stalks margined, obtuse; stem three or four feet high, branched, furrowed; leaves twice ternate; larger leaves pinnate;" leaflets lanceolate; umbels many rayed; flowers white, regular, small. July. Britain. P.

2. C. Macula'ta. *Spotted Water Hemlock*. "Serratures of the leaves sharp pointed; foot-stalks of the leaves membranous; two-lobed at the tip;" leaves twice pinnate; stem purple-brown, spotted near the bottom; flowers white, small, regular. August. North America. 1759. P.

The poisonous qualities of the first species have been long known; whether it constituted the fatal draught which terminated the life of Socrates, has been disputed: some thinking *Ceanthe Crocata*, others *Conium Maculatum*, to have afforded the poison; and others, again, a mixture of herbs. It is to be observed, that Plato specifies no particular name, but uses the term *φάρμακον*, denoting merely a strong potion.—The

"Root of Hemlock digg'd i'the dark,"



of Shakspeare's witches, resembles a small Parsnep, and is that of *Conium Maculatum*, a common weed in church-yards and on ditch banks.

CXXII. *ÆTHUSA*, from *αἰθυσσα*, to be made hot; on account of the pungency of its leaves. Nat. ord. Umbellatæ. 4 Species.

1. *A. Cynapium*. *Common Fool's Parsley*. "Leaves all alike, dark green, twice pinnate, smooth;" umbel of about eighteen rays; petals whitish; seeds very large. August. Britain. A.

2. *A. Bu'nium*. *Coriander-leaved Fool's Parsley*. "Radical leaves, pinnate; stem leaves many parted; leaflets bristly;" foot-stalks of the leaves sheathing, edges rolled in; umbels seven-cleft; small umbels seven flowered; flowers white, equal; seed oblong, furrowed. July. The Pyrenees. 1778. B.

3. *A. Fa'tua*. *Fine-leaved Fool's Parsley*. "All the leaves many parted, bristle-formed; leaflets mostly in whorls; stem many leaved; sheaths of the foot-stalks linear; general involucre many leaved;" flowers whitish. August. Native country unknown. 1781. P.

These plants are supposed to be slightly poisonous: the first species is a common weed in gardens, and has been mistaken both for Parsley and Chervil. It is, however, a lower plant: the leaves, when bruised, emitting a venomous sort of smell, and are darker. When in flower it is easily distinguished by its three-leaved pendent half involucrellum.



CXXIII. SE'SELI, supposed to be the *σεισις* of Theophrastus and Dioscorides; but a plausible derivation of its meaning has not been made. Nat. ord. Umbellatæ. 15 Species.

1. S. Monta'num. *Mountain Meadow Saxifrage*. "Foot-stalks of the leaves bearing branches, flattened at the edge, oblong, entire; stem leaves with linear segments; seeds downy;" stems erect, from one to three feet high; leaves doubly pinnate, three-cleft; umbels erect, many rayed, white. July. Italy. 1658. P.

2. S. Glau'cum. *Glaucous Meadow Saxifrage*. "Foot-stalks bearing branches, oblong, entire, with a membranous edge; branches spreading; leaflets linear, channeled, smooth, glaucous, longer than their foot-stalks;" seeds ovate, downy; umbels lax; flowers purplish without, white within. This plant is difficult to distinguish from the last. August. France. 1759. P.

3. S. Arista'tum. *Bearded-leaved Meadow Saxifrage*. "Foot-stalks branchy, lax, entire, somewhat membranous; leaves repeatedly compound; leaflets lanceolate, bristle-pointed; fruit ovate;" stems a foot and a half high; leaves shining; umbels terminating, large, whitish. July. The Pyrenees. 1739. P.

4. S. Ammoi'des. *Milfoil-leaved Meadow Saxifrage*. "Root leaves pinnate; leaflets tiled;" stem spreading, about a foot high; lower leaves on long stalks; upper leaves twice ternate; leaflets slender, undivided; umbels terminal, delicate, lax, of seven or



eight rays; flowers white; fruit minute. July. South of Europe. 1759. A.

5. *S. Tortuosum*. *Crooked Meadow Saxifrage*. "Stem lofty, much branched, rigid; leaves compound; leaflets linear, in bundles;" herbage glaucous; the stalks divide into slender branches, having several small lateral umbels, and are terminated by larger; flowers small, yellow. October. South of Europe. 1597. B.

6. *S. Hippomarathrum*. *Various leaved Meadow Saxifrage*. "Stem nearly leafless, partial involucre of one, cup-shaped, many-toothed leaf;" leaves twice pinnate, the first three cleft and linear; stem rushy, glaucous; uppermost leaves consist of a sheath only; flowers white, sometimes tinged with purple. July. Austria. 1656. P.

7. *S. Pyrenæum*. *Pyrenean Meadow Saxifrage*. "Leaves doubly pinnate; leaflets gashed, acute, linear; involucellum bristle-shaped, longer than the umbels;" foot-stalks of the leaves long, and sheathing at the base; large umbels, of six or eight rays; small umbels, dense, many flowered; flower yellow, purplish outward. July. The Pyrenees. 1731. P.

8. *S. Elatum*. *Slender-stalked Meadow Saxifrage*. "Stem elongated, with callosities at the joints; leaves twice pinnate; leaflets linear, distant;" stem much branched, smooth, leafy; umbels numerous; petals white; seeds smooth, ovate, with obtuse ribs. August. France. 1710. P.

These plants are rarely to be met with. The Seseli



seed of the old *Materia Medica*, seems to have been not the production of any of these species, but rather of *Athamanta Libanotis*, or *Tordylium Officinale*.

CXXIV. SMYR'NIUM, from *σμύrna*, the same with myrrh, the root smelling like myrrh. Nat. ord. Umbellatæ. 7 Species.

1. *S. Perfolia'tum*. *Perfoliate Alexanders*. "Stem leaves simple, alternate, serrate, clasping the stem with their heart-shaped base;" radical leaves stalked, twice or thrice ternate; umbels yellow, of many rays. May. Candia. 1596. B.

2. *S. Olusa'trum*. *Common Alexanders*. "Stem leaves in threes, stalked, serrated;" whole plant bushy, light green, shining, three feet high; root leaves thrice ternate; umbels numerous, greenish white, globose; seed black. May, June. Britain. P.

3. *S. Au'reum*. *Golden Alexanders*. "Leaves winged, serrate; lower leaves in threes; all the florets fertile;" stems numerous, smooth; umbels small, dense, yellow; seeds brown, not unlike Caraway. May. North America. 1699. P.

The first two species were formerly much cultivated, their blanched stems being used for soups and salads; they are now superseded by the more delicately flavoured Celery.

CXXV. CA'RUM, from Caria, in Asia Minor, where it grows abundantly. Nat. ord. Umbellatæ. 2 Species.



1. *C. Ca'ruí. Common Caraway.* "Stem branched; sheaths of the leaves distended; involucrellum commonly none;" stem two feet high, angular; leaves smooth, doubly pinnate, cut into linear segments; umbels numerous, upright; petals white or flesh-coloured; seed small, oblong, scored. May, June. Britain. B.

Caraway seeds are well known to possess a spicy smell and a warm aromatic taste, and on that account they are a common ingredient in cakes and comfits; they are also distilled with spirituous liquors to improve the flavour.

CXXVI. *THAP'SIA*, from Thapsus, a town of Africa, where it grows. Nat. ord. Umbellatæ. 5 Species.

1. *T. Villo'sa. Woolly-leaved Deadly Carrot.* "Leaflets toothed, woolly, joined at the base;" root acrid, fœtid, nauseous; stem three or four feet high; leaves large and spreading, twice or thrice pinnate; leaflets sessile, fern-like; umbels several, large; flowers yellow, small; seed long. July. South of Europe. 1739. P.

2. *T. Fœ'tida. Stinking Deadly Carrot.* "Leaflets many-cleft, acute, contracted at the base;" stems two feet high; umbels small; flowers yellow: the size of the whole plant smaller than the last. July. South of Europe. 1596. P.

3. *T. Garga'nica. Garganian Deadly Carrot.* "Leaves pinnate; leaflets deeply wing-cleft; seg-



ments linear, decurrent;" stem firm, round, tinged with purple; leaves large, deep green above, glaucous beneath; umbels very large, yellow; seeds an inch long. July. Barbary. 1683. P.

These plants are sometimes seen in curious botanical collections, but they are by no means common: they exude a foetid gum.

CXXVII. PASTINACA, from *pasco*, to feed, on account of its nutritious qualities. Nat. ord. Umbellatæ. 3 Species.

1. P. Lu'cida. *Shining-leaved Parsnep*. "Leaves simple, heart-shaped, lobed, transparent, acute, notched;" stem five to six feet high; leaves alternate, on stalks, dark green above, paler beneath, sometimes ternate, or even quinate; flowers yellow. July. South of Europe. 1771. B.

2. P. Sati'va. *Common Parsnep*. "Leaves simply pinnate, downy beneath;" stem three feet high; flowers small, yellow, in roughish umbels. The garden Parsnep is a variety of this, with larger smoother leaves. July. England. B.

3. P. Opo'ponax. *Rough Parsnep*. "Leaves pinnate; leaflets gashed at the base in front;" stem seven or eight feet high; root-leaves simple, heart-shaped; flowers small, yellow, in flat terminal umbels. June, July. South of Europe. 1731. P.

The last species has been long esteemed as furnishing the gum resin Opoponax, in much request for its deob-



struent virtues : but it is only in the warm regions of the East that the juice of this plant concretes into the proper thickness. The root of *P. Sativa* has been long cultivated for the table, and its saccharine juice renders it a nutritious food for several kinds of cattle.

CXXVIII. ANETHUM, from *ανη*, upward, and *θηω*, to run, because of its speedy growth. Nat. ord. Umbellatæ. 3 Species.

1. *A. Graveolens*. *Common Dill*. "Fruit compressed;" stem about two feet high; leaves finely cut, somewhat glaucous; flowers yellow; seeds with a membranaceous border: the whole plant much resembling fennel, but smaller, smell less pleasant. July. Spain. 1597. B.

2. *A. Se'getum*. *Portugal Dill*. "Fruit oval; stem-leaves three;" stem six or seven inches high; branches three or four; leaves twice or thrice pinnate, linear, flat; umbel convex, spreading; corolla yellow. July. Portugal. 1796. A.

3. *A. Fœniculum*. *Common Fennel*. "Fruit gibbous; stem-leaves numerous and deflexed;" stem three to six feet high; leaves finely cut; leaflets capillary or bristle-form; umbels large, hollow; petals yellow. July, August. England. P.

Var. 1. *Dulce, or Sweet Fennel*.

Var. 2. *Azoricum, or Finocchio*.

The leaves of the first variety of the last species are eaten boiled as sauce for fish, or cold with pickled fish.



Finochio is much cultivated in Italy as a salad herb, but suits few English palates. The seeds of all the species are warm, strong smelling, somewhat aromatic.

CXXXIX. *A'PIUM*, either from *apes*, bees, or *aper*, the head, chaplets being made of it. Nat. ord. Umbellatæ. 2 Species.

1. *A. Petroselinum*, *Common Parsley*. "Stem-leaves linear; involucellums minute;" stems smooth, scored; flowers pale yellow, regular; petals long, narrow. July. Sardinia. 1551. B.

Var. 1. *Sativum*, *Common Parsley*.

Var. 2. *Crispum*, *Curled Parsley*.

Var. 3. *Radice Esculentâ*, *large-rooted or Hamburgh Parsley*.

2. *A. Graveolens*, *Smallage, or Wild Celery*. "Stem-leaves wedge-shaped;" stem smooth, shining, furrowed; radical-leaves pinnate, ternate; leaflets three-cleft; umbels axillary; flowers small, white. July. Britain. B.

Var. 1. *Dulce*, or *Common Celery*.

Var. 2. *Rapaceum*, or *Turnip-rooted Celery*, or *Celeriac*.

The culinary uses of Parsley are well known. The third variety is cultivated for its root, which has the appearance of a small Parsnep; it boils exceedingly tender and palatable, and is very wholesome.

Though Wild Smallage cannot be improved by culture in this country, so as to resemble Celery, yet it is effected



in milder climates ; and it is said, that if Celery be neglected it will degenerate to its primitive state of Smallage.

CXXX. PIMPINEL'LA, corrupted from *bipennula*, a word expressing the pinnate structure of the leaves. Nat. ord. Umbellatæ. 10 Species.

1. P. Peregrina. *Nodding Burnet Saxifrage*. "Root-leaves pinnate, rounded, crenate; upper stem-leaves wedge-shaped, cut; umbels before flowering, drooping; seeds hispid;" umbels few, large; flowers white; seeds bristly. July. Italy. 1640. P.

2. P. Anisum. *Anise*. "Root-leaves three-cleft, gashed; stem-leaves acutely laciniated; seeds downy;" herb a foot high, branched slightly, rough; umbels erect; flowers white. July. Ægypt. 1551. A.

The seeds of the last species have been long known as agreeably stomachic, and imparting a pleasant flavour to cordials: they do not ripen in England, but are imported from Spain and Malta. Our native species are not seen in gardens.

### *Order Trigynia.*

CXXXI. VIBUR'NUM, from *vico*, to bind, some species having twigs fit for binding faggots. Nat. ord. Linn. Dumosæ. Juss. Caprifolia. 23 Species.

1. V. Tīnus. *Laurustinus*. "Leaves ovate, entire; ramifications of the veins downy, glandular on the under side;" a bushy spreading shrub; twigs red, smooth; flowers tinged with red, in cymes;



berries blue. Some authors distinguish three or four varieties, with the leaves more or less hairy; or shining. December to March. South of Europe. 1596. E. S.

2. V. Nu'dum. *Oval-leaved Viburnum*. "Leaves oval, somewhat wrinkled, margin rolled back, slightly crenate;" every part of the shrub smooth; leaves three or four inches long; evergreen in America, but not here; cymes large, on long stalks; flowers copious, white; berry black. June. North America. 1752. S.

3. V. Prunifo'lium. *Plum-leaved Viburnum*. "Leaves roundish, obovate, finely serrate, smooth; foot-stalks bordered;" shrub smooth, with wide spreading branches; cymes sessile; flowers white; berries roundish, dark blue. June. North America. 1731. S.

4. V. Dau'ricum. *Siberian Viburnum*. "Leaves ovate, serrate, dotted, hairy; cymes forked; of few flowers;" branches covered with a whitish gray bark; leaves hoary beneath; calyx none, except a sort of rim; corolla yellowish white, small, bell-shaped; berry large, round. June, July. Dauria. 1785. S.

5. V. Denta'tum. *Tooth-leaved Viburnum*. "Leaves roundish, ovate, acute, furrowed, plaited, strongly toothed;" nearly smooth on both sides; cymes stalked; berries dark blue, round; flowers rather small, hairy in the middle, white, as is also the calyx.



There is a smaller variety with the leaves downy beneath. July. North America. 1736. S.

6. V. Lanta'na. *Mealy Guelder Rose, Wayfaring Tree.* "Leaves heart-shaped, sharply serrated, veiny, downy beneath, with starry hairs;" a tufted bush, with round pliant mealy twigs; flowers white, in large convex stalked cymes; berries round, black. An American variety has the leaves larger and shining. June. Britain. S.

7. V. Acerifo'lium. *Maple-leaved Viburnum.* "Leaves three-lobed, pointed, sharply serrated, downy beneath; foot-stalks hairy, without glands;" branches round, downy; cyme of many downy branches on a long terminal stalk; flowers not radiate, as in the next; berries black. July. Virginia. 1736. S.

8. V. O'pulus. *Common Guelder Rose, Water Elder.* "Leaves three-lobed, sharply toothed; foot-stalks smooth, furnished with glands;" a bushy tree; cymes large, smooth, stalked, of numerous white flowers; the marginal ones abortive, dilated and radiate; berries drooping, scarlet. June. Britain. T.

9. V. Lenta'go. *Pear-leaved Viburnum.* "Leaves smooth, broad, ovate, pointed, finely and sharply serrate; foot-stalks bordered, crisped;" cymes sessile; buds large, ovate; berries black. July. North America. 1761. S.

10. V. Cassinoi'des. *Thick-leaved Viburnum.*



"Leaves egg lance-shaped, acute at each end, smooth, crenate, slightly rolled back at the edge;" cymes terminal, on short stalks; foot-stalks keeled, without glands; berries blueish black. June. North America. 1761. S.

11. V. Nítidum. *Shining-leaved Viburnum*. "Leaves linear, lanceolate, very smooth, entire, shining above; branches quadrangular;" a low shrub with small leaves. May, June. North America. 1768. S.

12. V. Læviga'tum. *Cassioberry Bush, Paraguay Tea*. "Leaves lanceolate, smooth, unequally serrate, entire at the base; branches two-edged," smooth; cymes at the end of short branches; flowers white, equal; berries red. July, August. Carolina. 1724. S.

The Laurustinus is a valuable evergreen; in a pure air it flowers all winter long, but is killed by smoky or close situations; it seldom bears its beautiful berries unless in a green-house; its leaves are occasionally variegated. The Guelder Rose has sometimes round bunches of flowers, all abortive, of extreme whiteness; they group very elegantly in the nursery with Lilac and Laburnum.

CXXXII. SAMBU'CUS, so called because the *sambuca*, a musical instrument, was made of its wood. Nat. ord. Linn. Dumosæ. Juss. Caprifolia. 5 Species.

1. S. E'bulus. *Dwarf Elder, Dane Wort*. "Cymes three-parted; stipulas leafy; stem herbaceous,"



about three feet high, brittle; leaves opposite, unequally pinnate; flowers dull red, or lilac; berries purplish black; plant nauseous. June. Britain. P.

2. *S. Canaden'sis. Canadian Elder.* "Cymes five-parted; leaves imperfectly twice pinnate; stem shrubby," about ten feet high, but frequently it dies down to the root in winter; flowers small, white, strong smelling; berries red, the size of Coriander seed: an intermediate species between the former and the next. June to August. North America. 1761. S.

3. *S. Ni'gra. Common Elder.* "Cymes five-parted, arborescent;" leaves unequally pinnate, opposite; leaflets generally five, smooth, oval, serrated; flowers white, fragrant, stalked; berries dark purple. We have two varieties, one with a greenish berry, the other with cut leaves, and called Parsley-leaved Elder. May. Britain. S.

4. *S. Racemo'sa. Red-berried Elder.* "Flowers in compound ovate clusters; stem arborescent," about nine feet high; branches grey, dotted with white; leaves opposite, unequally pinnate; flowers yellowish white, clusters erect, terminal; berries round, red, brilliant. May. South of Europe. 1596. S.

The berries of the Common Elder have been long in repute as affording a most excellent domestic wine. It has been observed that the summer is established when the Elder is in flower, and departs at the ripening of its fruit.

CXXXIII. RHUS, an ancient name *ῥοος*, which sig-



nifies fluid; how it is particularly applicable to this genus does not appear, some have derived it from *ρουσινος*, red, on account of the colour of its berries. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Terebintaceæ.* 33 Species.

1. *R. Coriaria.* *Elm-leaved Sumach.* "Leaves pinnate; leaflets oval, bluntly serrated, downy beneath;" a bushy shrub, with downy spreading branches of a spongy texture; leaves from eight to twelve inches long, of about five pair of leaflets; flowers greenish, each with a hoary germen which becomes a crimson berry, remaining after the leaves are fallen. July. The Levant. 1596. S.

2. *R. Typhinum.* *Virginian Sumach.* "Leaves pinnate; leaflets lance-shaped, pointed, sharply serrated, woolly beneath;" branches covered with a soft down resembling that of a young stag's horn; flowers in close tufts at the ends of the branches; seeds enclosed in purple woolly succulent covers: the leaves also turning purple in autumn give this shrub a beautiful appearance. July. North America. 1629. S.

3. *R. Gla'brum.* *Smooth Sumach.* "Leaves pinnate; leaflets numerous, lanceolate, serrate, naked on both sides; flowers perfect;" branches more spreading than the last species, not quite so downy, brownish; flowers in loose panicles, greenish. July. North America. 1726. S.

4. *R. Elegans.* *Carolina Scarlet Sumach.* "Leaves pinnate; leaflets lance-shaped, serrate, naked on both



sides; flowers diœcious;" branches irregular, smooth, purple powdered with grey; flowers of a bright red, in close thick large panicles. July. South Carolina. 1726. S.

5. R. Ver'nix. *Varnish Sumach*. "Leaves pinnate, smooth; leaflets elliptical, entire, opaque; foot-stalks entire, equal;" flowers in compound lax clusters, small, greenish, diœcious; fruit pear-shaped, polished, size of a pea. July. North America. 1713. S.

6. R. Copall'num. *Lentiscus-leaved Sumach*. "Leaves pinnate; leaflets quite entire; foot-stalk membranaceous, jointed," rising from four to five feet; branches spreading; leaves light green on both sides; flowers in loose panicles at the end of the branches, of a yellowish green. August. North America. 1688. S.

7. R. Toxicoden'dron. *Trailing Poison Oak or Sumach*. "Leaves ternate; leaflets stalked, oval, angular, cut or crenate; stem creeping;" leaf-stalks near a foot long; leaves more or less downy, margin sometimes entire; stem producing rooting fibres like Ivy; flowers in compound clusters, greenish, diœcious; berries white. R. Radicans is now understood to be only a variety of this with smooth entire leaves. July. North America. 1640. S.

8. R. Co'tinus. *Venice Sumach*. "Leaves simple, inversely egg-shaped;" stem bushy, about six feet high; flowers small, greenish white, in terminal com



pound panicles; fruit-stalks long, hair-like, dividing into feathery purple bunches. July. Italy. 1656. S.

The qualities of some of the species of this extensive shrubby genus are not a little remarkable. The branches, leaves, and fruit of *R. Coriaria* have been used in tanning leather from the most remote antiquity. The Virginian and Venice Sumach are also employed for the same purpose; the wood of the latter affords a beautiful yellow dye. *R. Vernix* was for some time thought to be the plant which produced the admirable black varnish of Japan, but this American species is not known to afford any such substance; to some persons both its touch and effluvia are highly poisonous, affecting the skin with inflammation. *R. Toxicodendron* produces the same effect, but in a slighter degree: it has lately been employed in paralytic cases, but with no great benefit.

CCCCIV. CASSINE, a name given by the Indians of Florida to *Ilex Vomitoria*, once reckoned under this genus. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 4 Species.

1. *C. Capensis.* *Cape Cassine, or Phyllerea.* "Leaves opposite, egg-shaped, obtuse, serrated; small branches, four-cornered;" a shrub about five feet high; bark brown purplish; leaves stalked, flat, veined, stiff; flowers white, in axillary branched corymbs. August. Cape of Good Hope. 1629. Gr. Ho.

2. *C. Maurocénia.* *Great Hottentot Cherry.* "Leaves opposite, inversely egg-shaped, leathery,



entire; little branches round;" a shrub same size as the former; leaves dark green; flowers in clusters, on one slender peduncle; corolla at first greenish yellow, then white; fruit a dark purple berry. August. Cape of Good Hope. 1690. Gr. Ho.

These plants require the protection of the green-house in winter. They attract attention from the beauty of their leaves.

CXXXV. STAPHYLE'A, σταφυλή, a bunch, or cluster, the fruit of this genus resembling a bunch of grapes in its inflorescence. Nat. ord. *Linn.* Trihi-latæ. *Juss.* Rhamni. 3 Species.

1. S. Pinna'ta. *Five-leaved Bladder Nut*. "Leaves pinnate; styles and capsules but two;" stem shrubby, about five or six feet high, branched, smooth; leaflets five, opposite, ovate, serrate, acute; stipulas large; flowers in drooping clusters, bell-shaped, pale yellow; capsules inflated, membranous. April to June. England. S.

2. S. Trifo'lia. *Three-leaved Bladder Nut*. "Leaves ternate;" stem stouter than in the former; older branches grey, the younger green; flowers from the sides of the branches, whiter and larger than in the last. May, June. Virginia. 1640. S.

CXXXVI. TA'MARIX, supposed to be from a Hebrew word meaning to cleanse, on account of its abstersive qualities. Nat. ord. *Linn.* Succulentæ. *Juss.* Portulacææ. 4 Species.



1. *T. Gallica*. *French Tamarisk*. "Stamens five; clusters lateral; branches smooth; leaves lanceolate, tiled, spurred at the base;" an elegant drooping slender branched shrub; twigs of a mahogany red; leaves minute, rather fleshy; calyx bell-shaped; corolla whitish. May to October. England. S.

2. *T. Germanica*. *German Tamarisk*. "Stamens ten, monadelphous; clusters terminal; leaves linear, lanceolate, sessile, obtuse," more upright and glaucous than the former, larger in all its parts of fructification; petals of the corolla obovate, flesh-coloured; down of the seed long, feathery. June to September. Germany. 1582. S.

CXXXVII. *DRYPIS*, from *δρυπτω*, to tear or rend, the leaves being spinous. Nat. ord. Caryophyllæ. 1 Species.

1. *D. Spino'sa*. *Prickly Drypis*. Stems decumbent at the base, then ascending, square; leaves opposite, sessile, awl-shaped, pungent; stem-leaves often with two or three spinous segments or teeth on each side; stem terminating in a forked panicle; flowers sessile, white or purplish; whole plant smooth, glaucous, in its adult state becoming shrubby. July. Italy. 1775. B.

CXXXVIII. *SAROTHRA*, from *σαρωθρον*, a broom, alluding to the habit of the plant. Nat. ord. *Linn. Rotacæ*. *Juss. Caryophyllæ*. 1 Species.



1. *S. Gentianoïdes*. *Bastard Gentian*. Stem erect, a span high, much branched; leaves small, narrow, linear; flowers terminal, solitary, erect, small; herb smooth; stamens variable. July. North America. 1768. A.

CXXXIX. TELEPHIUM, from Telephus, the son of Hercules, who was wounded by Achilles. Nat. ord. Linn. Holoraceæ. Juss. Portulacææ. 2 Species.

1. *T. Imperati*. *True or Green Orpine*. "Leaves alternate;" stems numerous, decumbent, round, leafy; leaves scattered, sessile, obovate, smooth; cymes terminal; flowers numerous, flesh-coloured or whitish. June to August. South of Europe. 1653. P.

CXL. PHARNACEUM, a name taken from Pliny, said to have been given to some plant in honour of Pharnaces, son of Mithridates, king of Pontus. Nat. ord. Caryophyllei. 14 Species.

1. *P. Cervina*. *Umbellate Pharnaceum*. "Flower stalks lateral, somewhat umbellate, about as long as the linear leaves;" stems numerous, spreading, thread-shaped, yellowish; leaves whorled; umbels of two or three greenish white flowers; plant inconspicuous. June. Russia. 1771. A.

#### *Order Tetragynia.*

CXLI. PARNAS'SIA, from Mount Parnassus, on which a plant called the Grass of Parnassus grew,



and which is supposed to have been this herb. Nat. ord. *Linn.* Campanaceæ. *Juss.* Capparides. 2 Species.

1. *P. Palustris.* *Common Grass of Parnassus.* "Leaves heart-shaped; nectaries with numerous segments;" stems erect, bearing one sessile leaf and one flower; leaves entire, ribbed, smooth; flower about an inch wide, white, and singularly elegant; petals marked with many parallel pellucid lines; globes of the nectaries and anthers pale yellow; the stamens are bent successively over the stigmas, retiring subsequently after the discharge of their pollen, as in Saxifrage and Rue. August. Britain. P.

### *Order Pentagynia.*

CXLII. *ARA'LIA*, its derivation not ascertained. Nat. ord. *Linn.* Hederaceæ. *Juss.* Araliæ. 10 Species.

1. *A. Spinosæ.* *Thorny Aralia, or Angelica Tree.* "Arborescent, stem and leaves prickly," about ten feet high; leaves jagged; leaflets oblong; ribs of the leaves armed with crooked spines; flowers on large loose umbels, of a greenish yellow. September. Virginia. 1688. S.

2. *A. Racemosa.* *Berry-bearing Aralia.* "Stem leafy, herbaceous, smooth," three or four feet high, irregularly branched; leaves alternate, branching; peduncles axillary, terminating by round umbels of



small flowers, whitish; berry round, channeled, black. June to September. Canada. 1658. P.

3. *A. Nudicaulis*. *Naked-stalked Aralia*. "Stem naked; leaves in pairs, ternate;" stem very short; flower-stalks supporting about three small umbels, in shape and colour like the last species: the roots of this plant have been sometimes fraudulently substituted for those of Sarsaparilla. July. North America. 1731. P.

CXLIII. *CRASSULA*, diminutive of *crassus*, thick, alluding to the fleshiness of the leaves. Nat. ord. *Linn. Succulentæ. Juss. Sempervivæ. 71 Species.*

1. *C. Ru'bens*. *Annual Red Crassula*. "Leaves scattered, semi-cylindrical, smooth; flowers lateral, solitary, nearly sessile; branches woolly;" stem about three inches high, reddish; leaves red near the tip; flowers white, fleshy, with a purple line on the segments of the calyx; somewhat the habit of a *Sedum*. June. Switzerland. 1759. A.

2. *C. Verticilla'ris*. *Whorl-flowered Crassula*. "Stem herbaceous; leaves spreading; flowers in whorls, awned;" stem diffuse; leaves opposite, egg-shaped, sessile, gibbous; flowers axillary, sessile, very minute; petals red in the middle; stamens red at the tip; stigmas red. July. South of Europe. 1788. A.

3. *C. Coccí'nea*. *Scarlet-flowered Crassula*. "Leaves ovate, cartilaginous, fringed, connate, sheathing at



the base;" stem reddish, jointed, about three feet high, dividing at top into many irregular branches; flowers in close umbels; corolla funnel-shaped, erect, fine scarlet. August. The Cape. 1710. S. Gr. Ho.

CXLIV. LYNUM, λινον, a string, from the tenacity of its fibres. Nat. ord. Linn. Gruinales. Juss. Caryophyllæ. 29 Species.

1. L. Usitatissimum. *Common Flax*. "Calyx-leaves ovate, acute, three-nerved; petals of the corolla crenate; leaves lanceolate; stem mostly solitary;" stem erect, round, smooth, leafy; flowers on stalks, erect, sky blue; seeds elliptical, shining. June, July. Britain. A.

2. L. Perenne. *Perennial Flax*. "Calyx and capsules blunt; leaves alternate, lanceolate, entire;" stems two or three; flowers at the end of the stalks, sitting, blue, delicate. June to August. England. P.

3. L. Hirsutum. *Hairy Flax*. "Calyx hairy, acuminate; flowers sessile, alternate; leaves alternate; branches opposite;" leaves lanceolate or ovate, hairy at the edge and back; flowers blue; petals so closely united at the base as to appear a monopetalous funnel-shaped flower. August. Austria. 1759. P.

4. L. Reflexum. *Reflex-leaved Flax*. "Calyx acuminate; leaves egg lance-shaped, acuminate, reflex, even, filaments connected;" stem a foot high, round, woody; leaves dark green; flowers in a sort



of umbel, large, blue. July. South of Europe. 1777. P.

5. *L. Tenuifolium*. *Fine-leaved Flax*. "Calyx acuminate; leaves linear, bristle-form, with points bent backwards;" stem erect, round, smooth, branched at top, leaves firm, shining; flowers in a sort of panicle, peduncled; calyx fringed with hairs; corolla rose-coloured, purple or white. July. South of Europe. 1759. P.

6. *L. Angustifolium*. *Narrow-leaved Flax*. "Calyx indistinctly three nerved; leaflets and capsule acuminate; leaves linear, lanceolate, three nerved; stems numerous, a little inclined;" nearly allied to the first species; stem more woody, and several from the same root; flowers smaller, and of a paler blue. July. England. P.

7. *L. Gallicum*. *Annual Yellow Flax*. "Calyx awl-shaped, acute; leaves linear, lance-shaped, alternate; peduncles of the panicle two-flowered; flowers nearly sessile," commonly five, but sometimes only three pistils; flowers yellow. July. South of France. 1777. A.

8. *L. Maritimum*. *Sea Flax*. "Calyx ovate, acute, awnless; leaves lance-shaped, lower ones opposite;" leaves covering the whole stem and branches, glaucous, sessile; flower-stalks opposite to a leaf, one flowered; corolla yellow. July, August. South of Europe. 1596. P.



9. *L. Alpinum*. *Alpine Flax*. "Calyx rounded, blunt; leaves linear, acute; stems declining," very leafy, round, many flowered; leaves sessile, entire; flowers stalked, pale blue, three times as long as the calyx; seeds blackish. July. Alps of Austria. 1739. P.

10. *L. Austracum*. *Austrian Flax*. "Calyx rounded, obtuse; leaves linear, acute, somewhat upright," nearly sessile; peduncles one-flowered, axillary; pendulous before the flowers open; corolla purplish blue or violet, with darker lines, and a yellow claw; petals entire. July. Austria. 1775. B.

11. *L. Flavum*. *Perennial Yellow Flax*. "Calyxes somewhat serrate, rugged, almost sessile, its leaflets lanceolate; panicle with branches, two-forked;" leaves sessile, narrow, smooth, thickish, with a dot on each side of their base; flowers elegant, upright, yellow, veined. June to August. Austria. 1793. P.

12. *L. Strictum*. *Upright Flax*. "Calyxes awl-shaped; leaves lance-shaped, upright, dagger pointed, rugged in the margin;" stems dividing at top into several branches, each sustaining two or three yellow flowers. May to July. South of Europe. 1759. B.

13. *L. Nodiflorum*. *Knotted Flax*. "Leaves on the flower branches, opposite, lanceolate; flowers alternate, sessile; calyxes the length of the leaves;" stem angular, two or three cleft: leaves with a brown gland at the base, on each side; stem leaves alter-



nate; calyx linear; corolla yellow. July, August. Italy. 1759. P.

14. *L. Catharticum*. *Purging Flax, or Mill Mountain*. "Leaves opposite, egg lance-shaped; two-forked; petals acute;" stems branching into a forked slender panicle; leaves sessile, glaucous beneath; herb smooth; leaflets of the calyx one-nerved, serrate; petals of the corolla white, obovate. August. Britain. A.

The first species is thought to have come originally from those parts of Egypt which are exposed to the inundations of the Nile, and may be said to be one of the most valuable plants of the whole vegetable kingdom. Its bark, first steeped in water, and then by a machine separated from the stem, becomes flax, which is afterwards converted into linen; which, when worn to rags, is again manufactured into paper: the seeds, by expression, yield an oil of great utility; and the residuum, under the name of oil-cake, is given to cattle, who soon grow fat upon it. The seeds also, when boiled in water, afford an excellent emollient decoction, useful in a variety of disorders. The second species is sometimes cultivated, and produces a coarser flax; the remaining species are rarely seen, unless in botanic gardens. *L. Cartharticum*, as its name implies, is used as a medicine by the country people; it is common enough in fields, but it almost refuses cultivation.

CXLV. *STATICE*, from *στασις*, to stop or arrest; on account of its styptic qualities. Nat. ord. *Linn.* *Aggregatæ*. *Juss.* *Plumbagines*. 37 Species.



1. *S. Armeria*. *Common Thrift, or Sea Gilliflower*. "Stalks simple, capitate; leaves linear, flat, obtuse; awns of the calyx minute;" leaves in tufts, deep green; stalks invested with a tubular membrane, soon becoming torn; flowers inodorous, pink, varying to deep red, or white; heads surrounded by a many leaved involucre. May to July. Britain. P.

2. *S. Cephalotes*. *Large simple-stalked Thrift*. "Stalk simple, capitate; leaves oblong, flat, acuminate, attenuated at the base;" stem becoming shrubby by age; stalks a foot and a half high, terminated by a large globular head of pale red flowers; petals obtuse. May to July. Portugal. 1740. P.

3. *S. Limonium*. *Sea Thrift, or Sea Lavender*. "Flowers stalk round, panicled; leaves oblong, obtuse, smooth, nerveless, with a sharp point under the tip, waved at the edge;" a plant varying in size and luxuriance; stalk hard and rigid; branches ending in close tiled spikes of blue flowers; calyx pink, white when dry. May to August. Britain. P.

4. *S. Gmelini*. *Gmelin's Thrift*. "Flower stalk angular, panicled; leaves oblong, ovate, notched at the end, flat, edges cartilaginous, dagger pointed beneath;" flowers blue, smaller, and more clustered than in the last species, which it much resembles; but the leaves are firmer, and not waved at the edge. July. Siberia. 1796. P.



5. *S. Latifolia*. *Broad-leaved Thrift*. "Stalk panicled, very much branched, rough; leaves downy, with minutely starry hairs;" calyx somew hatpointed, without awns; leaves a foot long; flowers small, blue, numerous; panicle rather level, topped, often two feet wide. May to July. Tartary. 1788. P.

6. *S. Scoparia*. *Broom Thrift*. "Stalk round, panicled; leaves oblong, ovate, leathery, pointed, dotted underneath;" much resembling the last species, but smaller, and not hairy; flowers blue. June to August. Siberia. 1796. P.

7. *S. Oleæfolia*. *Olive-leaved Thrift*. "Stalk round, panicled, lower branches barren; leaves oblong, spoon-shaped, obtuse, smooth, with scarcely any point," minutely dotted on both sides; flowers in slender spikes, all turned one way, blue or reddish. May to August. South of Europe. 1683. P.

8. *S. Cordata*. *Blunt-leaved Thrift*. "Stalk panicled; leaves spoon-shaped, retuse;" flowers numerous, blue, or reddish, tiled, one rowed; leaves many, thick, fleshy, spreading on the ground. May to July. South of Europe. 1752. P.

9. *S. Reticulata*. *Matted Sea Lavender*. "Stalk panicled, trailing, zigzag; branches rough, with points; lower branches barren; leaves wedge-shaped, rather acute, without points;" stems matted and entangled together; flowers light purple, few in each spike. July. England. P.



10. *S. Specio'sa*. *Plantain-leaved Thrift*. "Stalk paniced, its branches angular, and somewhat winged; flowers tiled, crowded; leaves egg lance-shaped, pointed," roughish; stem erect, naked, terminating in a large dense panicle of pink or whitish flowers. July. Russia. 1776. P.

11. *S. Tartarica*. *Tartarian Thrift*. "Stalk divaricated, branching; branches three-angled; flowers distant; leaves lanceolate, obovate, pointed;" stalks subdivided into smaller stalks, terminated by spikes of pale blue flowers, spread so as to have somewhat the appearance of an umbel. July. Russia. 1731. P.

12. *S. Sinuata*. *Scollop-leaved Thrift*. "Stem herbaceous, winged; root leaves sinuate; stem leaves awl-shaped, decurrent, three in a whorl; calyx without awns;" flowers crowded in level topped hairy tufts, all turned upwards, pale yellow, elegantly contrasted with the pale purple calyx. May to September. Greece. 1629. P. Gr. Ho.

The thrifts are of a rigid habit; their flowers are copious, and retain much of their beauty when dried. *S. Armeria* thrives in almost all situations, whence its name. It has been in much request for edgings, both in country and town gardens, as it bears the smoke of the latter very well.

### *Order Polygynia.*

CXLVI. *XANTHORHIZA*, *ξανθορριζα*, yellow, and *εὐζα*, a root; from the colour of that part. Nat. ord.



**Linna.** Multisiliquæ. **Juss.** Ranunculaceæ. 1 Species.

1. **X. Apiifolia.** *Parsley-leaved Yellow Root.*  
Stem bushy, about a yard high, each branch crowned with a tuft of dark green, shining, long-stalked pinnate leaves; leaflets rhomboid, lanceolate, somewhat serrate; flowers in long clusters, of a dusky purple; root and stem internally of a bright yellow. February to April. North America. 1766. S.



CLASS VI.

HEXANDRIA.

*Order Monogynia.*

1. *Flowers furnished both with a calyx and a corolla.*

I. **BROMELIA.** Corolla deeply three-cleft, or of three petals, with a nectareous scale at the base of each; calyx three-cleft, superior; berry three celled.

II. **TRADESCANTIA.** Corolla of three petals, equal, filaments erect, bearing jointed hairs; calyx of three leaves; capsule three celled.

III. **FRANKENIA.** Corolla five petaled; calyx five cleft, funnel-shaped; stigma six parted; capsule one celled, three valved.

IV. **BERBERIS.** Corolla six petaled, with two glands at the claws, style round; berry two-seeded; calyx six-leaved.

V. **LEONTICE.** Corolla six petaled; nectary six-leaved, attached to the base of the petals; calyx of six leaves deciduous; berry inflated, one celled; seeds few, globular.

VI. **PRINOS.** Corolla of one petal, wheel-shaped, from three to seven cleft; calyx inferior, six cleft; berry of six seeds.

VII. **CANARINA.** Corolla six cleft, bell-shaped;



calyx six-leaved; stigmas six; capsule inferior, six celled, many seeded.

VIII. *Chlora perfoliata*. XII. *Lythrum hyssopifolium*.

XVII. *Fumaria cucullata*.

2. *Flowers, having for the calyx a spathe or sheath.*

VIII. HÆMANTHUS. Involucrum of several leaves, many flowered; corolla superior, in six segments; berry of three cells; seeds solitary.

IX. LEUCOJUM. Corolla superior, bell-shaped, of six equal petals, thickened at their summit; stigma simple, stamens equal.

X. GALANTHUS. Corolla superior, of six petals, the three innermost shortest, notched; stigma simple.

XI. NARCISSUS. Corolla superior, of six equal petals; nectary of one leaf, mostly funnel-shaped, surrounding the stamens; stigma three cleft.

XII. PANCRACTIUM. Corolla superior, of six petals; nectary twelve cleft, bearing the stamens.

XIII. AMARYLLIS. Corolla superior, irregularly six petaled; filaments inserted into the throat of the tube, bending down, unequal in size.

XIV. AGAPANTHUS. Corolla inferior, of one petal, funnel-shaped, six parted, regular; stamens declining.

XV. PONTEDERIA. Corolla inferior, of one petal, six cleft, two lipped; three of the stamens inserted



into the top, and three into the tube of the corolla ; capsule three celled.

XVI. **BULBOCODIUM.** Corolla inferior, funnel-shaped ; six petaled, with narrow claws bearing the stamens.

XVII. **ALLIUM.** Corolla inferior, six parted, spreading ; petals ovate ; spathe many flowered ; umbels heaped.

XVIII. **HYPOXIS.** Corolla superior, six parted, permanent ; capsule tapering at the base ; spathe two valved ; seeds very many.

*3. Flowers naked, or without a calyx.*

XIX. **HEMEROCALLIS.** Corolla inferior, bell-shaped, with a cylindrical tube ; stamens declining ; capsule three celled ; seeds numerous, roundish, polished.

XX. **AGAVE.** Corolla superior, six parted, erect ; filaments longer than the corolla, erect.

XXI. **ALOE.** Corolla inferior, six cleft ; erect, with an expanded mouth and a nectareous base ; filaments inserted into the receptacle.

XXII. **ALETIS.** Corolla inferior, six cleft, funnel-shaped, wrinkled ; stamens inserted into the base of the segments ; capsule three celled, many seeded.

XXIII. **POLIANTHES.** Corolla inferior, six cleft, funnel-shaped, incurved ; filaments inserted into the mouth of the tube, erect ; germ at the bottom of the corolla.



XXIV. CONVALLARIA. Corolla inferior, six cleft; berry, when unripe, spotted, three-celled; stigma three cornered.

XXV. HYACINTHUS. Corolla inferior, six cleft, bell-shaped; three honey-bearing pores on the germ; stamens inserted into the receptacle.

XXVI. ASPHODELUS. Corolla inferior, six parted; nectary six valves, covering the germ, each valve bearing a stamen.

XXVII. ANTHERICUM. Corolla inferior, of six petals, spreading flat; capsule ovate.

XXVIII. ORNITHOGALUM. Corolla inferior, of six petals, erect, permanent, their upper part spreading; filaments alternate, widening at the base; capsule three celled.

XXIX. SCILLA. Corolla inferior, of six petals, spreading at the bottom, deciduous; filaments thread-shaped; stigma simple.

XXX. PHORMIUM. Corolla inferior, of six petals, the three inner ones longest; stamens longer than the corolla; capsule oblong, triangular; seeds compressed.

XXXI. DRACÆNA. Corolla inferior, of six petals, upright, cohering at their base; filaments swelling in the middle; berry three celled; seeds solitary.

XXXII. ASPARAGUS. Corolla inferior, six petals, cohering by the claws; three inner petals reflected at the end; berry three celled; two seeded.



XXXIII. GLORIOSA. Corolla inferior, of six petals waved, reflexed; style oblique.

XXXIV. ERYTHRONIUM. Corolla inferior, bell-shaped, of six petals, reflexed; nectary, two little scales at the base of each of the three inner petals.

XXXV. UVULARIA. Corolla inferior, of six petals, erect; nectary, a chink at the base of each; filaments shorter than the corolla.

XXXVI. FRITILLARIA. Corolla inferior, bell-shaped, of six ovate petals, with a nectariferous cavity at the base of each; stamens nearly the length of the corolla.

XXXVII. LILIUM. Corolla inferior, bell-shaped, of six petals, each marked with a longitudinal nectary; capsule with valves, connected by a network of fibres.

XXXVIII. TULIPA. Corolla inferior, bell-shaped, of six petals; style none; stigma, with three lobes, sitting; capsule three celled.

XXXIX. YUCCA. Corolla inferior, bell-shaped, six-parted, spreading; nectary none, style none; stamens club-shaped; berry six celled.

XL. OPHIOPOGON. Corolla half-superior, permanent; anthers sessile; stigma simple; berry with one seed.

4. *Flowers incomplete.*

XLI. ACORUS. Spadix cylindrical, covered with florets; corolla five petaled, naked; style none; capsule three celled.



**XLII. ORONTIUM.** Spadix cylindrical, covered with florets; corolla six petaled, naked; style none; drupe, with one bony seed.

*Order Digynia.*

**XLIII. ORYZA.** Calyx a glume of two valves, containing a single flower; corolla of two angular valves, of equal length, growing to the seed.

*Order Trigynia.*

**XLIV. RUMEX.** Calyx three leaved; corolla of three petals, converging, permanent; seed solitary, triangular, naked; stigmas many cleft.

**XLV. COLCHICUM.** Calyx a spathe; corolla six cleft; tube springing immediately from the root; capsules three, connected, inflated; many seeded.

**XLVI. MEDEOLA.** Calyx none; corolla six cleft, rolled back; berry three seeded.

**XLVII. HELONIAS.** Calyx none; corolla six petaled; capsule of three cells, with many seeds.

**XLVIII. TRILLIUM.** Calyx three leaved; corolla three petaled; berry of three cells.

**XLIX. TOFIELDIA.** Calyx three cleft; corolla of six equal petals, inferior; capsules three, combined at the base; seeds numerous.



## CLASS VI.

## HEXANDRIA.

*Order Monogynia.*

I. BROMÉLIA, in memory of Olaus Bromel, a Swedish writer on natural history. 1687. Nat. ord. *Linn.* Coronariæ. *Juss.* Bromeliæ. 10 Species.

1. B. Ana'nas. *Pine Apple*. "Leaves fringed, spinous, sharp-pointed; spike terminated by a tuft of leaves;" root leaves from two to three feet long, spike, dense, scaly, oval; flowers blueish, sessile, small, scattered upon the thick fleshy receptacle, which takes the form of the strobile, or cone of the Pine Tree, whence its name; and which is composed of closely united berries. January to December. South America. 1650. B. Hot Ho.

This delightful fruit, though long cultivated in the West Indies, has only of late years been brought to perfection in Europe; it rarely ripens its seeds here, and the plants are reproduced by suckers or by their leafy crown. There are several varieties in cultivation.

II. TRADESCAN'TIA, from the two John Tradescants, father and son, cultivators of exotic plants in England, in the reign of Charles the First. Nat. ord. *Linn.* Ensatiæ. *Juss.* Junci. 17 Species.

1. T. Virgīnica. *Virginian Spider Wort*. "Stem erect; leaves lanceolate, smooth; flowers numerous,



in a sort of terminal sessile umbel; calyx hairy;" leaves sheathing, concave, dark, shining green; flowers large, deep blue, varying sometimes to white, each lasting but a day; anthers yellow, filaments purple; shaggy. May to October. North America. 1640. P.

2. T. Erec'ta. *Upright Spider Wort*. "Stem erect, smooth; leaves elliptic, acute at each end, smooth, clusters terminal;" stem a yard high, leafy; leaves pale, glaucous beneath; clusters solitary, or in pairs, of many sky blue flowers; about half the size of the last. July, August. Mexico. 1794. A.

III. FRANKENIA, from John Franck, professor of botany at Upsal, a predecessor of Linnæus, died 1661. Nat. ord. Caryophyllei. 4 Species.

1. F. Læ'vis. *Smooth Sea Heath*. "Flowers solitary; petals a little scalloped at the end, obtuse; leaves linear, clustered, fringed at the base;" stem procumbent, branched, leafy, smooth; flowers resembling a *Lychnis*, pink or white. July, August. England. P.

2. F. Hirsu'ta. *Hairy Sea Heath*. "Flowers in clusters; leaves linear, clustered, oblong, fringed at the base; stem hairy;" flowers violet coloured; the plant is scarcely more than a luxuriant variety of the former. July. Crete. 1789. P.

3. F. Pulverulen'ta. *Powdery Sea Heath*. "Flowers solitary; petals scalloped at the end; leaves obo-



vate, abrupt, downy, and powdery beneath;" stems numerous, prostrate, repeatedly forked; leaves opposite, two pair at every joint; flowers axillary and terminal, pale purple. July. England. A.

It is observable that the number of the stamens in this genus bears an analogy to the three stigmas and three valves of the capsule, and not to the petals, nectaries, or segments of the calyx, which are usually five—this is a rare circumstance.

IV. BER'BERIS. This name is said to mean, in the Eastern tongues, the shell which contains pearls. Nat. ord. *Linn.* not arranged. *Juss.* Berberides. 5 Species.

1. B. Vulga'ris. *Barberry or Pipperidge Bush.* "Bunches simple, pendulous; leaves obovate, toothed, fringed; spines triple;" a shrub of eight or ten feet in height; stems upright, branched, armed with thorns; flowers towards the ends of the branches, yellow; at the base of each petal two orange coloured dots; berries ovate, cylindric; first green, then scarlet. May. Britain. S.

Var. 1. with white berries.

Var. 2. with purple berries; thorns numerous.

Var. 3. Canada Barberry. Berries black; leaves broader and shorter.

2. B. Cre'tica. *Cretan or Box-leaved Barberry.* "Flower-stalks somewhat umbelled; spines triple;" a shrub from three to four feet high; flowers not suc-



ceeded by fruit in England; stalks armed with spines at every joint; leaves in bundles, unequal, ovate, smooth; plant tender, rare. May. Crete, Japan. 1759. S.

The Barberry is cultivated for the sake of its acid berries, which are used for pickling, and garnishing dishes; and, being boiled with sugar, form an esteemed rob or jelly, or a dry sweetmeat. The smell of the flowers is offensive when near, but agreeable at a proper distance. The irritability of the stamens is remarkable; if touched with a pin near the base, on the inside, they suddenly contract over the stigma, and explode their pollen; another peculiarity ascribed to this plant, is, that ears of corn growing near it constantly prove abortive, even at the distance of three or four hundred yards across a field; this mildewing influence is, however, by some close observers, totally denied. The root and bark afford a yellow dye.

V. LEON'TICE, a name substituted for *Leontopetalon*, lion's leaf. Nat. ord. *Linn.* Corydales. *Juss.* Berberides. 5 Species.

1. L. *Thalictroides*. *Columbine-leaved Lion's Leaf*. "Stem leaves twice or thrice ternate, terminal; leaves three lobed, acute;" stem a foot high, or more, bearing one thrice compound leaf at bottom, one near the flowers twice compound, both sessile, dark green; flowers green, in a small slightly compound cluster. May. North America. 1755. P.

VI. PRINOS, perhaps from *πρω*, to saw; on ac-



count of the strong serratures of the leaves in some species. Nat. ord. *Linn.* *Dumosæ.* *Juss.* *Rhamni.* 7 Species.

1. *P. Verticillatus.* *Deciduous Winter Berry.* "Leaves obovate, lanceolate, pointed, doubly serrate, with downy veins underneath;" stem shrubby, eight or ten feet high, branched; leaves alternate; flowers one or two at the base of the leaf-stalks, small, white; berries crimson; larger than those of the Holly. August. Virginia. 1756. S.

2. *P. Glaber.* *Smooth or Evergreen Winter Berry.* "Leaves lanceolate, obtuse, smooth, serrate at the top;" stems much branched; leaves alternate, stalked, lightish green, with a yellow rib, pale and downy beneath, evergreen; flowers small, on axillary stalks, generally three together; berries round, dark purple; plant of lower growth than the preceding. July, August. Canada. 1759. E. S.

VII. CANARYNA, from the Canary Isles, of which it is a native. Nat. ord. *Linn.* *Campanacæ.* *Juss.* *Campanulacæ.* 2 Species.

1. *C. Campa'nula.* *Canary Bell Flower.* "Stem erect; leaves halbert-shaped, in threes, or opposite;" stem three feet high, herbaceous, branched, upper branches forked; flowers from the forks of the stem, large, peduncled, drooping; corolla reddish-yellow, brighter at the bottom, with a yellow eye: each segment marked with three purple nerves; it differs



from a *Campanula* only in the number of its stamens.  
January to March. Canary Islands. 1696. P. Gr. Ho.

VIII. *HÆMAN'THUS*, from *αἷμα*, blood, and *ανθος*, a flower; alluding to the fine red colour of the corolla and involucre. Nat. ord. *Linn.* *Spathaceæ.* *Juss.* *Narcissi.* 14 Species.

1. *H. Coccineus.* *Salmon coloured Blood Flower.* "Leaves two, tongue-shaped, flat, smooth, lying flat upon the ground; umbel dense, level topped, shorter than the involucre;" flower-stalks solitary, speckled with purple; flowers pale red; involucre of six broad scarlet leaves; of a striking appearance. August to October. The Cape. 1629. P. Gr. Ho.

Of this handsome, but tender genus, the above species is an old inhabitant of the gardens of Europe, and of our green-houses; but it is not very common, being preserved with some difficulty.

IX. *LEUCO'JUM*, from *λευκος*, white, and *ιον*, the violet. Nat. ord. *Linn.* *Spathaceæ.* *Juss.* *Narcissi.* 3 Species.

1. *L. Ver'num.* *Spring Snow Flake.* "Spathe single flowered, club-shaped;" leaves four or five, flat, darkish green; stalk hollow, channeled; spathe whitish, opening at the side, whence a flower proceeds; corolla white; petals tipped with green, rather fragrant. February, March. Italy. 1596. P.

2. *L. Æsti'vum.* *Summer Snow Flake.* "Spathe



many flowered; style club-shaped;" leaves numerous, erect, keeled, bright green; flower-stalks mostly five from the same sheath, each supporting a single flower, pendulous, scentless; petals white, tipped with green. April, May. England. P.

3. *L. Autumnale*. *Autumnal Snow Flake*. "Spathe many flowered; style thread-shaped;" stalks about six inches high, reddish brown; flowers about three, pendulous, inodorous, red at their base; leaves capillary, or hair-like, appearing after the flowers. September. Portugal. 1629. P.

These plants are distinguished from the true snow-drop by the equality of the petals.

X. *GALANTHUS*, from γαλα, milk, and ανθος, a flower; alluding to its milky whiteness. Nat. ord. *Linn*. Spathaceæ. *Juss*. Narcissi. 1 Species.

1. *G. Nivalis*. *Common Snow Drop*. Leaves yellowish at the base, callous at the tip; flowers solitary, pendulous, milk-white; the three inner petals have on the outside a green heart-shaped spot, in the inside six yellowish green lines; in gardens these inner petals are generally multiplied; it is to be doubted whether this plant be truly indigenous. February. England. P.

XI. *NARCIS'SUS*, from ναρκησις, torpor; its scent being narcotic. The youth Narcissus was fabled to be turned into this flower. Nat. ord. *Linn*. Spathaceæ. *Juss*. Narcissi. 17 Species.



1. N. Poe'ticus. *Poetic Narcissus*. "Spathe one-flowered; cup of the nectary very short, wheel-shaped, membranous, crenate; leaves bluntly keeled, reflexed at the margin;" border of the nectary crimson; flower large, fragrant, white, often double; sometimes two flowers in a sheath. May. England. P.

2. N. Angustifo'lius. *Narrow-leaved Narcissus*. "Spathe one-flowered; cup of the nectary short, membranous, crenate; leaves not broader than the flower-stalk;" generally confounded with the last species, but is not half so large; edge of the nectary more erect; it flowers six weeks earlier. April. South of Europe. 1570. P.

3. N. Biflo'rus. *Pale Narcissus, Primrose Peerless*. "Spathe two-flowered; cup of the nectary short, wheel-shaped, membranous, crenate; leaves acutely keeled, inflexed at the margin;" petals cream colour, not pure white, as in the first species; nectary yellow, with a pale edge, not crimson; flowers smaller. April, May. England. P.

4. N. Tenu'ior. *Slender Narcissus*. "Spathe single flowered; cup of the nectary short, plaited; leaves linear, awl-shaped, channeled;" petals more yellow than the last; edge of the nectary brown, as the flower advances fragrant. May. Europe. 1789. P.

5. N. Incompara'bilis. *Peerless Daffodil*. "Spathe one-flowered; cup of the nectary bell-shaped, plaited, crisped, half as long as the petals; leaves acutely keeled;" nectary orange-coloured; petals pale yel-



low. A double variety, called the Butter and Egg Narcissus, or Orange Phoenix, is much admired; it was formerly esteemed only a variety of the following species. April, May. Spain. 1629. P.

6. *N. Pseu'do Narcissus.* *Common Daffodil.* "Spathe one-flowered; cup of the nectary bell-shaped, crisped, obscurely six-cleft, as long as the ovate upright petals;" leaves two or three, glaucous, bluntly keeled; stalk two-edged; petals pale yellow; nectary of a golden hue. Such is the wild plant: the garden varieties differ in the fulness of colour as well as in the shape and position of their numerous petals and divided nectaries. March, April. England. P.

7. *N. Bi'color.* *White and Yellow Daffodil.* "Spathe single flowered; cup of the nectary bell-shaped, erect, crisped, longer than the ovate flat spreading petals;" leaves slightly concave, nearly straight; petals white; nectary dark yellow: differs from the last in having leaves less glaucous, petals shorter. There is a variety, called the Great Daffodil, with yellow double large flowers, leaves twisted. April, May. South of Europe. 1570. P.

8. *N. Mi'nor.* *Small Daffodil.* "Spathe single flowered; nectary inversely conical; cup six-cleft, crisped, longer than the lance-shaped petals;" leaves spreading, short, glaucous; petals pale yellow; cup darker; flower small. March to May. Spain. 1629. P.

9. *N. Moscha'tus.* *Musk Narcissus.* "Spathe single flowered; flower drooping; cup of the nectary



cylindrical, erect, crenate, furrowed, the length of the oblong twisted petals;" leaves concave, glaucous, flowery, cream-coloured white, odorous. April. Spain. 1629. P.

10. N. Trian'drus. *Reflexed Narcissus*. "Spathe with two or three pendulous flowers; cup of the nectary bell-shaped, crenate, half the length of the reflex petals; three stamens much longer;" flowers inodorous, cream-coloured, sometimes straw-coloured; leaves spreading, narrow. April, May. Portugal. 1629. P.

11. N. Odo'rus. *Sweet Yellow Narcissus*. "Spathe usually two-flowered; cup of the nectary half the length of the ovate petals, bell-shaped, with six shallow rounded equal segments;" leaves semi-cylindrical, channeled, grass green; flowers golden, highly fragrant. N. Lætus, N. Nutans, and N. Trilobus of some authors seem to be trifling varieties of this. April, May. South of Europe. 1629. P.

12. N. Jonquil'la. *Jonquil*. "Spathe many flowered; cup of the nectary bell-shaped, very short, crenate; leaves awl-shaped, slightly channeled above; flowers of a golden yellow, about half the size of the first species, which in shape they resemble, of a rich and powerful sweetness, frequently double. April, May. Spain. 1596. P.

13. N. Tazet'ta. *Polyanthus Narcissus*. "Spathe with numerous flowers; cup of the nectary bell-shaped, plaited, abrupt, one-third the length of the



elliptical petals ;" leaves nearly flat, broad, deep green ; petals yellow ; nectary orange-coloured ; scent powerful ; the Oriental and Paperwhite species of some authors seem to be only varieties of this. March, April. Spain. 1596. P.

14. *N. Bulboco'dium*. *Hoop-petticoat Narcissus*. "Spathe single flowered ; cup of the nectary funnel-shaped, much larger than the linear petals ; stamens and style declining ;" leaves numerous, semi-cylindric, dark green, narrow ; flowers inodorous, golden yellow. This plant is remarkable for its large nectary, surrounded by small petals, unlike the rest of its genus. April. Portugal. 1629. P.

Most of the species of this favourite genus, like others much cultivated, are apt to form numerous varieties, which circumstance causes them to be distinguished with much difficulty. The catalogues of the London and Dutch florists furnish not less than a hundred varieties of *N. Tazetta* alone, which, of course, are many of them transient. The *Jonquil* is raised with success in glasses filled with soft water early in the spring.

XII. *PANCRA'TIUM*, from παν, all, and κρατος, power, a plant of every virtue. Nat. ord. *Linn.* Spatheaceæ. *Juss.* *Narcissi*. 11 Species.

1. *P. Mari'timum*. *Sea Daffodil*. "Spathe many flowered ; leaves linear, lanceolate, glaucous, rounded at the end ; stamens bent, inserted between every other segment of the large nectary," and of the same length ; flowers fragrant, white, or tinged with a faint



red; petals with a green line at the back. May, to July. South of Europe. 1597. P.

2. *P. Illyricum*. *Starry Pancratium*. "Spathe many flowered; leaves lanceolate, obtuse, glaucous; the six teeth of the nectary not bearing the stamens, acute, two-cleft;" stamens as long again as the segments; flower-stalk a little inclining, not so long as the leaves, bearing numerous white flowers, each spreading like a star, and fragrant. May, June. South of Europe. 1605. P.

The structure of the nectary and the insertion of the stamens afford an excellent instance of an essential generic character which at one view distinguishes these plants from any of their bulbous companions.

XIII. AMARYLLIS, either from the shepherdess mentioned by Theocritus and Virgil, or from *αμαρυγία*, splendour. Nat. ord. *Linn.* Spathaceæ. *Juss.* Narcissi. 38 Species.

1. *A. Lu'tea*. *Yellow Amaryllis, or Autumnal Narcissus*. "Spathe undivided, obtuse; flower sessile, bell-shaped, erect, shortly tubular at the base; stamens erect, alternately shorter;" flowers bright yellow, seldom rising above four inches; the leaves come up at the same time with the flower, and afterwards increase through the winter. September. South of Europe. 1596. P.

2. *A. Atamas'co*. *Atamasco Lily*. "Spathe two-cleft, acute, flower stalked, bell-shaped; petals



nearly equal, erect, shortly tubular at the base; stamens equal, bent down;" flowers of a fine carnation on the outside at first, but fade into a white. May, June. North America. 1629. P.

3. A. Formosiss<sup>i</sup>ma. *Jacobæa Lily*. "Spathe undivided; flower stalked; corolla two-lipped, nodding, deeply six parted; stamens and pistil bent down;" flowers large, of a deep red, brilliant, beautiful. May, June. South America. 1658. P. Gr. Ho.

4. A. Belladon'na. *Belladonna Lily*. "Spathe many-flowered; corolla somewhat erect; edges of the petals flat; stalk compressed; leaves sharply channeled, bluntly keeled, very smooth;" stalk purple, sustaining from five to seven flowers, of a soft purple, inclining to white within, of an agreeable scent. July to September. West Indies. 1712. P.

5. A. Sarnien'sis. *Guernsey Lily*. "Spathe many-flowered; petals linear, flat; stamens and pistil straitish, longer than the corolla; stigmas parted, turned back;" leaves dark green, shining, two to four in number, scarcely an inch long; stalk about a foot high; flowers from eight to twelve, a brilliant and beautiful red, in decay crimson. September, October. Japan. 1659. P. Gr. Ho.

All the species of this genus are beautiful, and merit the attention of the Botanist and Florist. The Guernsey Lily is reputed to owe its introduction to that island from the shipwreck of a vessel on its return from Japan, the



bulbs being cast on shore, took root in the sandy soil, and produced flowers, where they have flourished ever since.

XIV. AGAPAN'THUS, from αγαπητος, pleasant, and ανθος, a flower, on account of its beauty. Nat. ord. *Linn.* Spathaceæ. *Juss.* Narcissi. 2 Species.

1. A. Umbella'tus. *African Blue Lily*. "Leaves in clusters, thick, succulent, dark green; umbel large;" flowers numerous, light blue, each flower supported on a stalk. August to January. The Cape. 1692. P. Gr. Ho.

XV. PONTEDE'RIA, from Julius Pontedera, Professor of Botany at Padua, 1718. Nat. ord. *Linn.* Ensateæ. *Juss.* Narcissi. 6 Species.

1. P. Corda'ta. *Heart-leaved Pontederia*. "Leaves heart-shaped; flowers stalked;" an aquatic plant rising a foot or two above the water; leaves alternate, on long spongy sheathing stalks; flowers numerous, of a full sky blue; spike three or four inches long. August. Virginia. 1751. P.

XVI. BULBOCO'DIUM, from βολβος, a bulb, and κωδιον, wool. Nat. ord. *Linn.* Spathaceæ. *Juss.* Narcissi. 1 Species.

1. B. Ver'num. *Spring-flowering Bulbocodium*. Leaves three, lanceolate, enveloped in a sheath; flowers the length of the leaves, white at first, afterwards acquiring different shades of purple. This plant has the habit of Colchicum, but differs in hav-



ing but one style; and from *Crocus*, which it much resembles, by the number of stamens: it is rare in gardens. Sometimes it has only four stamens and four petals. February, March. Spain. 1629. P.

XVII. *ALLIUM*, probably from *halo*, to emit a vapour or smell. Nat. ord. *Linn.* Spathaceæ. *Juss.* Asphodeli. 53 Species.

\* *Stem-leaves flat, umbels bearing capsules.*

1. *A. Ampeloprasum.* *Great Round-headed Garlic.* "Umbel globular; stamens three-pointed; petals rough on the keel;" stem a foot high, leafy at bottom; leaves glaucous, succulent; flowers in a close ball, on foot-stalks; corolla pale purplish. August. England. P.

2. *A. Porrum.* *Common Leek.* "Umbel globular; stamens three-pointed; petals with a rough keel; root coated;" stem rather tall, leafy at bottom; leaves varying, sometimes very narrow; spathe shortly conical, deciduous; flowers purplish, in a close very large ball, on purple peduncles. Very like the former, and perhaps only a variety. May. Switzerland. 1562. P.

3. *A. Lineare.* *Linear-leaved Garlic.* "Umbel globose; stamens three-pointed, twice as long as the corolla:" it has narrower leaves than the last, the stalks are smaller, and do not rise so high; the heads of the flowers are also smaller, and of a purple colour. July. Siberia. 1752. P.

4. *A. Victoriale.* *Long-rooted Garlic.* "Um-



bel rounded ; stamens lance-shaped, longer than the corolla ; leaves elliptic ;" stem about eighteen inches high ; petals of a dirty white, with a tincture of green. May. Switzerland. 1739. P.

5. *A. Subhirsutum.* *Hairy Garlick, or Dioscorides's Moly.* " Lower leaves grassy ; stamens awl-shaped ;" bulb the size of a hazel nut ; stem about eighteen inches in height, smooth, solid ; lower leaves grassy, embracing the stalk ; stem leaves broad, keeled ; flowers in an umbel, white. May. The Levant. 1596. P.

6. *A. Magicum.* *Homer's Moly, or Sorcerer's Garlick.* " Small branches bulb bearing ; stamens simple ;" stem weak, cylindric, about a foot high ; root-leaves broad, channeled, obtuse ; scent very strong ; petals white. This is confounded by some writers with a larger species called *A. Nigrum*, or *Black Garlick.* June, July. Austria. 1596. P.

7. *A. Obliquum.* *Oblique-leaved Garlick.* " Stamens thread-shaped, thrice as long as the flower ; leaves oblique ;" stalk cylindrical, about two feet high ; flowers in a globose umbel ; petals ovate, yellow, with a green keel ; spathe purple, pointed. June, July. Siberia. 1759. P.

8. *A. Tartaricum.* *Tartarian Garlick.* " Umbel flat ; stamens simple ; leaves semi-cylindrical ;" stem about six inches high, leafy towards the base ; spathe of two valves, shrivelling ; corolla flat, white ; filaments shorter than the petals, with brown anthers. July. Siberia. 1787. P.



9. A. Ro'seum. *Rose.coloured Garlick.* "Umbel flat-topped; stamens simple; leaves semi-cylindrical," linear, scarcely so long as the stalk; spathe obtuse; flowers large, dark purple; stamens white. June. South of France. 1752. P.

\*\* *Stem-leaves flat, umbel bearing bulbs.*

10. A. Sati'vum. *Cultivated Garlick.* "Bulb compound; stamens three pointed;" the root bulbs, commonly called cloves of Garlick, invested with a white skin; leaves linear, long, narrow; flowers white, rising amidst the small bulbs which terminate the stem. July. Sicily. 1548. P.

11. A. Scorodopra'sum. *Rocambole.* "Stamens three-pointed; leaves somewhat crenate; sheaths two-edged;" bulb compound, smaller than the last; stem from two to three feet high, producing many small bulbs at the top; leaves broad, crenate at the edges; flowers in a sort of globular head, pale purple. July. Hungary. 1596. P.

\*\*\* *Stem-leaves columnar, umbel bearing capsules.*

12. A. Spæroce'phalon. *Small Round-headed Garlick.* "Stamens three-pointed, longer than the corolla;" leaves semi-cylindrical; head of flowers conical; petals red, with a darker keel; style purple, very long. July. Italy. 1759. P.

13. A. Descen'dens. *Purple-headed Garlick.* "Stamens three-pointed; outer flower-stalks shorter;" stem two feet high; sheath four-cleft; leaves cylindrical, channeled above; at the origin of the stalk two bulbs; flowers purple. This species is thought



by some to be only a variety of the last. July. Switzerland. 1766. P.

14. *A. Parviflorum.* *Small-flowered Garlic.* "Umbel globose; stamens simple, longer than the corolla; spathe awl-shaped;" stem streaked, leafy; flowers very small; outer petals ovate, dark coloured, inner twice the length, lanceolate, purple. July. South of France. 1781. P.

15. *A. Flavum.* *Sulphur-coloured Garlic.* "Flowers pendulous; petals ovate; stamens longer than the corolla;" stalk leafy, round, glaucous; leaves not angular, flattish above the base; sheath twice as long as the umbel; corolla deep yellow; stamens simple. July. Austria. 1768. P.

16. *A. Pal'lens.* *Pale-flowered Garlic.* "Flowers pendulous, lobed; stamens simple, equalling the corolla;" leaves alternate, seven-cornered, erect; spathe awl-shaped, nerved; corolla bell-shaped, white; petals obovate, with a green keel. July. South of Europe. 1779. P.

17. *A. Paniculatum.* *Panicked Garlic.* "Peduncles capillary, spread out; stamens awl-shaped; spathe very long;" leaves awl-shaped, channeled; flowers hanging on long loose slender peduncles; petals purple, obovate, the length of the stamens; spathe with a long awl-shaped point. July. South of Europe. 1780. P.

\*\*\*\* *Leaves radical, stem naked.*

18. *A. Nutans.* *Flat-stalked Nodding Garlic.*



"Stem two-edged; leaves linear, flat; stamens three-pointed:" a plant varying so much from different soils and age as scarcely to be recognized for the same. July. Siberia. 1783. P.

19. *A. Ascalo'nicum.* *Eschalotte, or Shallot.* "Stem columnar; leaves awl-shaped; umbels globular; stamens three-pointed;" stem about seven inches high; spathe membranous; petals of the corolla erect, ovate, blue with a dark keel; anthers yellow; bulbs oblong, bound together by a membranous covering. June, July. Palestine. 1548. P.

20. *A. Senes'cens.* *Narcissus-leaved Garlick.* "Stalk two-edged; leaves linear, convex beneath, polished; umbel roundish; stamens awl-shaped;" petals erect, standing wide from each other, channeled, white. *A. Angulosum* with leaves and scape a little angular; flowers large, is scarcely more than a variety of this. July. Germany. 1596. P.

21. *A. Canaden'se.* *Canadian Garlick, or Tree Onion.* "Scape columnar; leaves linear, head bulb bearing;" stem hardly longer than the leaves; sheath ovate, sharpish pointed; flowers few, whitish; petals oval; anthers brownish red. June, July. North America. 1739. P.

22. *A. Ursi'num.* *Ramson Garlick.* "Scape three-sided; leaves lance-shaped, stalked; umbel flat-topped;" flowers large, numerous, white; bulbs in bunches, united, in smooth coats; root-leaves usually



two; smell and taste of the plant very acrid. May. Britain. P.

23. A. Trique'trum. *Three-cornered Garlick or Moly*. "Scape naked, three-sided; stamens simple; leaves resembling those of the bur reed, much keeled;" petals lanceolate, white, with a green keel; anthers yellow; stigma acute. May, June. Spain. 1768. P.

24. A. Ce'pa. *Common Onion*. "Scape swelling out below, longer than the hollow columnar leaves;" flowers, like those of Garlick, white. June, July. South of Europe. B.

25. A. Mo'ly. *Yellow Garlick or Moly*. "Scape somewhat cylindrical; leaves lance-shaped, sitting; umbel level-topped;" three outer petals spreading, three inner erect; flowers yellow; scent very strong. June. South of Europe. 1596. P.

26. A. Fistulo'sum. *Welsh Onion*. "Scape equalling in length the smooth, round, bellying leaves." This plant does not form bulbs at the root like the common Onion. April, May. Siberia. 1629. P.

27. A. Schænopra'sum. *Chive Garlick, or Chives*. "Scape equalling the columnar, slender, awl-shaped leaves;" bulbs long, flat, oval; flowers large, faint purple, with a darker line; smell very strong. May, June. Britain. P.

28. A. Sibīricum. *Siberian Garlick*. "Scape columnar; leaves semi-cylindric; stamens awl-shaped;" umbel level-topped; petals white with a greenish



keel; stamens shorter than the corolla. July. Siberia. 1777. P.

29. A. Chamæ-Moly. *Bastard Garlick, Dwarf Moly*. "Scape scarcely any, naked; capsules drooping; leaves flat, fringed;" bulb the size of a hazel nut; leaves four or five, grassy; flowers from seven to ten, white, with the outside purple or greenish; after flowering the stem bends down. January, February. South of Europe. 1774. P.

The various species of *Allium* which are not used for culinary purposes are somewhat rare in gardens, as their powerful scent is agreeable to few. None of those with the appellation of Moly exactly accord with Homer's brief description; viz. a milk-white flower, having a black root. Why they should be supposed an antidote to magic and enchantment, it is in vain to enquire. Common Garlick in this country is more in use as a medicine than an esculent, having been long esteemed in relieving spasmodic asthmas, and diseases of languid circulation. On the Continent, where the plant is less acrid, it enters into the composition of various dishes, as well as its next species, Rocambole. The common Onion *A. Cepa* has numerous varieties, and from the days in which it was worshipped in Egypt down to the present time, has continued in estimation as a favourite food or condiment. Scallions are those Onions which have sprouted during the Winter in the drying-house, and being early in the Spring replanted, they speedily grow fit for use as green Onions, the outer coat of the bulb being pulled off: some persons have asserted the Scallion to be a distinct species without a bulbous root, but what that species is they have not



mentioned. The Welsh Onion or Ciboule, forms no bulb at the root, and is eaten in its green state, but being much stronger in flavour, is not so much esteemed as the last; it is, however, extremely hardy, shooting with great vigour early in the Spring. Chives are considered as milder than Scallions; they likewise form no bulbs, or very small ones, and are in request for Spring salads. Shallot forms a cluster of small bulbs which are much used for pickle. The Canada, or tree Onion, is a curiosity, as producing its bulbs at the top of the stalk as well as at the root, both sorts equally re-producing the plant; these likewise make excellent pickle. The common Leek is useful in broth and soups, a decoction of it in gruel has been found efficacious in nephritic and inflammatory disorders.

XVIII. HYPOX'IS, from *υπο*, underneath, and *οξυς*, sharp, alluding to the pointed base of the capsule. Nat. ord. *Linn.* Coronariæ. *Juss.* Narcissi. 15 Species.

1. H. Erec'ta. *Upright Hypoxis*. "Hairy; scape somewhat four-cornered, shorter than the linear lanceolate leaves; capsules egg-shaped;" floral leaves two, awl-shaped, between which is one sessile flower, sometimes two; corolla resembling an *Ornithogalum*, externally green, hairy, with a red rib, internally yellow. June. North America. 1752. P.

XIX. HEMEROCAL'LIS, from *ἡμερος*, a day, and *καλλος*, beauty, expressive of the short duration of its flowers. Nat. ord. *Linn.* Coronariæ. *Juss.* Narcissi. 7 Species.



1. H. Fla'va. *Yellow Day Lily*. "Leaves linear, keeled; petals flat, acute, ribbed;" leaves radical, erect, deep green; flower-stalks paniced; flowers yellow, funnel-shaped, fragrant, beautiful. June. Hungary. 1596. P.

2. H. Gramí'nea. *Narrow-leaved Day Lily*. "Leaves channeled, narrow, nearly triangular; floral leaves short, membranous; corolla swelling at the base;" flowers of a deeper yellow than the last, not so fragrant, rather longer. July. Siberia. 1759. P.

3. H. Ful'va. *Copper-coloured Day Lily*. "Leaves linear, keeled; three inner segments of the corolla obtuse, waved, with ribs branched at the margin;" leaves rather broader, of a tender green in the Spring; corolla of an orange tawny hue, scentless; plant larger than the first species. July, August. The Levant. 1596. P.

4. H. Japo'nica. "Leaves somewhat heart-shaped, acute; corolla funnel-shaped;" leaves deep green, varying much in breadth; flowers in racemes, drooping, elegant; corolla white; tube furrowed. August, September. Japan. 1790. P.

5. H. Cæru'lea. *Blue-flowered Day Lily*. "Leaves ovate, acuminate; border of the corolla bell-shaped;" leaves alternate, stalked; flowers terminating, alternate, upright, blue; seeds with a membranous wing. These last two species are by some botanists made a different genus. May to July. Japan. 1790. P.



XX. AGA'VE, from *αγαυος*, admirable. Nat. ord. Linn. Coronariæ. Juss. Bromeliæ. 7 Species.

1. A. America'na. *Common American Aloe*. "Scape branching; style longer than the filaments;" leaves thorny, toothed; flowers greenish yellow, erect, in thick clusters at every joint; plant rising twenty feet and upwards, forming a kind of pyramid. August to October. South America. 1640. S. Gr. Ho.

It is a common error that this plant does not flower till it is one hundred years old, as that circumstance entirely depends on climate; in warm countries it comes to maturity in a few years, in England it is of slower growth. The instances on record here are of plants from fifty to eighty years of age.

XXI. A'LOE, derivation uncertain, perhaps from *αλς*, the sea, it loving a maritime situation. Nat. ord. Linn. Coronariæ. Juss. Asphodeli. 17 Species.

1. A. Arbores'cens. *Tree Aloe*. "Leaves embracing the stem, reflexed, spiny at the margin;" stem from ten to twelve feet high, naked, embraced by the leaves, which grow at top, and which are succulent, of a sea green colour; flowers in pyramidal spikes, of a bright red. August to December. The Cape. 1731. S. Gr. Ho.

2. A. Vulga'ris, or Barbade'n'sis. *Barbadoes Aloe*. "Leaves toothed, upright, succulent, awl-shaped," sea green, spotted with white; stem about three feet;



flowers in a loose spike, of a bright yellow. May to August. The Levant. 1596. S. Hot Ho.

3. A. Soccotri'na. *Soccotrine Aloe*. "Stem shrubby; leaves oblong, sword-shaped, somewhat spotted; margin horny, white, spinous; spines straight;" stems from three to four feet high; flowers in long spikes, of a bright red tipped with green. February to April. The Cape. 1731. S. Gr. Ho.

4. A. Hu'milis. *Dwarf Hedge-Hog Aloe*. "Stemless; leaves three-cornered, awl-shaped, armed on all sides with weak spines;" flowers in spikes, below of a fine red, pale green above. February to May. The Cape. 1731. P. Gr. Ho.

5. A. Margarit'ifera. *Pearl Aloe*. "Stemless; leaves three-cornered, dagger pointed, studded with white protuberances;" flowers in bunches, drooping, cylindrical, reddish; plant of humble growth. May to September. The Cape. 1739. P. Gr. Ho.

6. A. Verruco'sa. *Warted or Pearl-tongue Aloe*. "Stemless; leaves sword-shaped, acute, in two rows, with white protuberances;" flowers on somewhat tall stalks in loose spikes, drooping, of a beautiful red tipped with green. March to October. The Cape. 1731. P. Gr. Ho.

7. A. Lin'gua. *Tongue Aloe*. "Stemless; leaves tongue-shaped, toothed, smooth, two-rowed;" flowers in bunches, upright, cylindrical, red below, green above; leaves varying, long and narrow, or short and



thicker, sometimes spotted. March to October. The Cape. 1731. P. Gr. Ho.

8. A. *Variegata*. *Partridge-breast Aloe*. "Stemless; leaves in three ranks, veined and spotted, channeled; angles cartilaginous;" flowers in bunches, cylindrical, of a fine red tipped with green; leaves fleshy, edges slightly serrated. March to September. The Cape. 1720. P. Gr. Ho.

The first four species were formerly reckoned merely varieties, with many others, of a species called by Linneus *Perfoliata*. The inspissated juice of the leaves is the Aloe used in medicine. That produced from No. 3, at Socotra, an island in the Arabian Sea, is the most esteemed. The Hepatic, or Common Aloe, from No. 2, is usually brought from Barbadoes and other West India Islands, where it is cultivated in large quantities. *Caulline*, or Horse Aloe, is thought to be only the refuse of the last. All the species are ornamental, green-house, or stove plants.

XXII. A'LETRIS, from αλειω, to grind. Nat. ord. *Linn.* Coronariæ. *Juss.* Asphodeli. 2 Species.

1. A. *Farino'sa*. *Mealy Aletris*. "Leaves lanceolate, membranous; flowers alternate, stemless;" flowers in a spike, greenish white. June. North America. 1768. P.

XXIII. POLIANTHES, from πολις, a town, and ανθος, a flower, because generally cultivated and sold in towns. Nat. ord. *Linn.* Coronariæ. *Juss.* Narcissi. 1 Species.



1. *P. Tubero'sa*. *Common Tuberose*. Stem simple, erect, round, leafy, a yard high; leaves linear, lanceolate, taper-pointed, sheathing, rather glaucous; flowers several, in an oblong spike, white, tinged with a blush of pink, of a rich and delicious odour, most powerful at night, resembling the flavour of ginger, frequently double. August. East Indies. 1629. P. Gr. Ho.

XXIV. *CONVALLA'RIA*, from its growing in vallies. Nat. ord. *Linn.* Sarmenaceæ. *Juss.* Asparagi. 11 Species.

\* *Corolla bell-shaped.*

1. *C. Maja'lis*. *Lily of the Valley*. "Scape semi-cylindrical, naked, smooth; leaves egg-shaped;" flowers in racemes, somewhat unilateral, nodding, white, sweet scented; segments recurved; leaves two, radical, on long stalks, ribbed; berries red: it varies with a double flower, rarely with a red one. May, June. Britain. P.

\*\* *Corolla funnel-shaped.*

2. *B. Verticilla'ta*. *Narrow-leaved Solomon's Seal*. "Leaves in whorls;" stems two feet high, erect, simple, angular, smooth; leaves lanceolate, acute, sessile, glaucous underneath; flowers white, green at the tip; peduncles two or three flowered; berry blue. May. Scotland. P.

3. *C. Polygona'tum*. *Angular Solomon's Seal*. "Stem angular; leaves alternate, half embracing the



stem; flower-stalks axillary, generally one flowered;" leaves nerved, smooth, unilateral; flowers white with a green line down the segments, nodding, sweet scented; berry blue, with three seeds. May, June. England. P.

4. *C. Multiflo'ra.* *Common Solomon's Seal.* "Leaves alternate, embracing the stem; stem cylindrical; flower-stalks axillary, generally one flowered;" stems leafy, nodding; leaves elliptic, nerved; flowers white, green at the base and tip; berry blueish black. May, June. Britain. P.

\*\*\* *Corolla wheel-shaped.*

5. *C. Racemo'sa.* *Cluster-flowered Solomon's Seal.* "Leaves alternate, sessile, egg-shaped, acuminate; panicle terminal, naked;" stem two or three feet high, stiff, zigzag; leaves nerved, thin, flexible; flowers white, very small; corolla open, divided almost to the base; berries small, red. May, June. North America. 1640. P.

6. *C. Stella'ta.* *Star-flowered Solomon's Seal.* "Leaves alternate, embracing the stem, elliptical, acute; raceme terminal, simple;" stem weak, almost hollow within; leaves large, smooth, slightly fringed; flowers white, in a close spike; corolla large, open, star-like; berries red. May, June. North America. 1596. P.

7. *C. Bifo'lia.* *Least Solomon's Seal.* "Leaves heart-shaped; flowers tetrandrous;" root-leaves solitary, on long stalks; stem two or three inches high, slender, slightly angular; stem-leaves two nerved;



flowers white, small, shorter than the foot-stalks; corolla deeply four cleft; berries red. May, June. North of Europe. 1596. P.

The Lily of the Valley has been long held in estimation, few flowers can boast of so much delicacy united with so much fragrance; an extract prepared from the roots and flowers partakes of the bitterness as well as the purgative qualities of Aloes: a green dye may be also prepared from the leaves. The root of *C. Polygonatum* is fleshy, and full of knots, which, when cut obliquely, are figured with veins having somewhat the appearance of a seal, whence the English name.

xxv. HYACIN'THUS, fabled to have sprung from the blood of the youth of that name, accidentally killed by Apollo. Nat. ord. *Linn.* Coronariæ. *Juss.* Asphodeli. 13 Species.

1. *H. Non Scrip'tus.* *Common Hyacinth, or Hare Bell.* "Corolla bell-shaped, six parted to the very base; segments rolled back; floral leaves in pairs;" leaves about six, keeled, smooth, linear, pointed; flowers in a raceme, from eight to twelve, nodding, pointing one way, blue, varying to white, sweet smelling. By some botanists this plant is reckoned under the genus *Scilla*. *H. Cernuus* seems to be a variety of this with flesh-coloured flowers. May. Britain. P.

2. *H. Amethys'tinus.* *Amethyst-coloured Hyacinth.* "Corolla bell-shaped, half six cleft, cylindrical at the base;" leaves scored, linear, lying mostly on the ground; flowers bright blue, smaller than those of



the last, scentless, sometimes varying to flesh colour, or with white stripes and edges. April, May. Italy. 1759. P.

3. *H. Orienta'lis. Garden Hyacinth.* "Corolla funnel form, half six cleft, swelling at the base;" two small floral leaves under each flower-stalk; leaves broadish, keeled, pale green at bottom, darker towards the end; flowers nodding, not pointing the same way as in the first species; flowers sweet smelling, of various colours, white, blue, red, yellow, in every shade; corolla usually double, scape tinged with brown near the top. March, April. The Levant. 1596. P.

4. *H. Roma'nus. Roman Grape Hyacinth.* "Corolla bell-shaped, half six cleft, in racemes; stamens membranaceous;" leaves very long; racemes long, round, with numerous flowers; flowers white, anthers blue. May. Italy. 1596. P.

5. *H. Musca'ri. Musk Grape Hyacinth.* "Corolla ovate, unequal; one floral leaf above the flower-stalk, and one below it;" leaves sheathing each other at the base, obtusely pointed; flowers in a spike; petals reflected, of a dusky purple; upper flowers sometimes yellowish, of an agreeable musky scent. April, May. The Levant. 1596. P.

6. *H. Como'sus. Purple Grape Hyacinth.* "Corolla angular, cylindrical; upper flowers barren, on longer foot-stalks;" leaves large, linear, bluntly pointed; lower flowers far asunder, yellowish green,



at the end blue or purple; upper flowers smaller, blue, as are their stalks; the flowers vary into blue or white. May. South of Europe. 1596. P.

H. Monstrosus, or Feathered Hyacinth, is only a variety of this, with the petals finely cut into segments.

7. H. Botryoïdes. *Blue Grape Hyacinth*. "Corolla globular, uniform; leaves channeled, cylindrical, upright, stiff;" flowers varying from blue to white, and ash colour; rare, except in very old gardens. April. Italy. 1596. P.

8. H. Racemo'sus. *Starch Hyacinth*. "Corolla ovate, uniform; flowers crowded, the upper ones sessile; leaves linear, lax, drooping;" flowers in a close globular spike, dark blue, with a three cornered white mouth, smelling like new starch. April, May. South of Europe. 1596. P.

9. H. Seroti'us. *Late flowering Hyacinth*. "Outer petals somewhat distinct, inner petals united;" flowers in a raceme, all pointing the same way, drooping, each with an awl-shaped floral leaf; corolla of a dull greenish red, scentless. June. Spain. 1759. P.

The first species abounds throughout Europe, particularly in England; it has its specific name *non scriptus*, because it has not upon its petals the fancied marks of resemblance to the Greek letters α, α, which, according to Ovid, were Apollo's exclamation of grief for the loss of his favourite, and which also were the first two letters in the name of Ajax, who likewise was changed into the same flower; but whether that flower was one of the pre-



sent genus *Hyacinthus*, is doubtful; some authorities supposing it to be the Martagon Lily. The garden Hyacinth, so much esteemed, has been cultivated with most success in Holland, whole acres being covered with it in the vicinity of Haarlem; and so great has been the rage for it, that two thousand Dutch florins have been given for a root. Formerly the single flowers were in more request than the double. The Dutch florists have almost infinite varieties, to which they give the name of gods, emperors, kings, &c. These plants make a handsome appearance when growing in glasses, as ornaments for the chimney-piece, or flower-stand.

XXVI. ASPHODELUS, has been derived from *σπῆδος*, ashes; it having been planted by the ancients on graves. Nat. ord. *Linn.* Coronariæ. *Juss.* Asphodeli. 7 Species.

1. *A. Luteus.* *Yellow Asphodel.* "Stem leafy; leaves three sided, scored;" stalks round, simple, about three feet high, covered with long triangular boat-shaped leaves; flowers in a sort of spike, opening in succession, beginning at the bottom; corolla yellow, deeply divided, sweet smelling. May, June. Sicily. 1596. P.

2. *A. Ramosus.* *Branched Asphodel, or King's Spear.* "Stem naked; leaves sword-shaped, keeled, smooth," long, flexible, sharp at the edge, growing in irregular clusters; flowers white, with a purple line on the outside of each segment of the corolla. May. South of Europe. 1551. P.



3. *A. Fistulosus*. *Onion-leaved Asphodel*. "Stem naked; leaves scored, stiff, awl-shaped, somewhat hollow," in a large cluster from the root; stem branched; about two feet high; flowers white, with a purple line on the outside of each segment. June to September. South of Europe. 1596. A.

XXVII. *ANTHERICUM*, from *ανθος*, a flower, and *ερχος*, a hedge, or wall. Nat. ord. *Linn.* *Coronaria*. *Juss.* *Asphodeli*. 54 Species.

1. *A. Serotinum*. *Mountain Spider Wort*. "Leaves nearly flat, scape one flowered;" leaves semi-cylindrical, narrow, nerved; petals of the corolla equal, nerved, white within, dusky red without. June. Wales. P.

2. *A. Ramosum*. *Branching Anthericum*. "Leaves linear, awl-shaped, scape branched; peduncles solitary; corolla flat, pistil straight;" flowers in loose spikes, white, opening from seven to three o'clock. May, June. South of Europe. 1570. P.

3. *A. Liliago*. *Grass-leaved Anthericum*. "Leaves flat, scape simple; corollas flat, pistil bending down;" leaves radical, many channeled, grassy; spike loose, with about ten flowers; petals in two ranks, the inner pure white, the outer with a green line at the back. May, June. South of Europe. 1596. P.

4. *A. Liliastrum*. "*Savoy Anthericum*, or *St. Bruno's Lily*." "Leaves flat, scape most simple; corolla bell-shaped; stamens bending down;" leaves



long, slender, white; spine thickly covered with spreading flowers; petals blue, under, usually white, with a yellow point which is bluish; anthers orange-yellow; sweet-scented. May, June. The Alps. 1838. P.

5. *A. stramonium*. *Stramonium*. "Hence Italy, not shaped, column: scape somewhat branched;" a low plant; flowers in short dense spikes, yellow, sweet-scented. June, July. The Alps. 1838. P.

6. *A. Chamaejasme*. *Lamellaria*. *Androsace*, or *Aspid.* "Lower somewhat shaped, flowers mostly;" leaves closely interwoven, radical ones, curved inward; flowers in a thick spike; petals blue, pinkish, yellow; anthers orange. August. Britain. P.

XXVII. *ORNITHOGALUM*. *ore*, *ore*, a bird, and *gala*, milk: from the white flowers, or roots. Vet. vii. *Lin.* *Coronaria*. *Juss.* *Aspidod.* 43 Species.

1. *O. Uniflorum*. *One-flowered Star of Bethlehem*. "Scape two-leaved: peduncle one-flowered;" outer petals lanceolate, abrupt, inner petals broader; all of them yellow above, green below; an inch long or more. June. Siberia. 1781. P.

2. *O. Latifolium*. *Yellow Star of Bethlehem*. "Scape angular, with a linear leaf at its base; root leaves linear; flower-stalks umbellate, smooth, undivided; petals lanceolate;" leaves keeled, mostly solitary; flowers yellow, streaked with green. March, April. England. P.



O. Minimum seems a small variety of this.

3. O. Umbellatum. *Common Star of Bethlehem.* "Corymbus many flowered, its lower stalks rising above the rest; filaments tapering;" inflorescence between a corymbus and an umbel, of shining white, starry, blossoms; green at the back; leaves linear, channeled. April to June. England. P.

4. O. Pyrenaicum. *Spiked Star of Bethlehem.* "Cluster very long; petals of the corolla linear, obtuse; filaments lance-shaped, equal, dilated; style the length of the stamens;" flower-stalks equal, spreading, subsequently erect; leaves radical, very long, furrowed; stalk about three feet high; flowers numerous, small, greenish. June, July. England. P.

5. O. Stachyoides. *Close spiked Star of Bethlehem.* "Cluster very long; petals lanceolate, oblong; filaments broad, lanceolate, alternate ones shorter by half;" flowers sulphur-coloured, with a green nerve at the back; leaves narrow. April to July. South of Europe. 1771. P.

6. O. Latifolium. *Broad-leaved Star of Bethlehem.* "Cluster very long; filaments awl-shaped; peduncles many times longer than the flower; leaves lanceolate, sword-shaped," spreading on the ground; stalk, thick, strong, bearing a long spike of white flowers. June. Egypt. 1629. P. Gr. Ho.

7. O. Pyramidalis. *Pyramidal Star of Bethlehem.* "Cluster conical; flowers numerous, ascending; petals oval, oblong, flat; stamens lance-shaped, equal;



style very short;" leaves keeled, long, dark green; stalk about three feet high, terminated by a long spike of white flowers, on long flower-stalks. July. Spain. 1752. P.

8. *O. Nu'tans. Drooping Star of Bethlehem.* "Flowers directed one way, pendulous; nectary stamens-like, bell-shaped;" leaves radical, pale, glaucous, linear, channeled; cluster simple, composed of about seven large, elegant, greenish silvery-white flowers. April, May. Britain. P.

This is a very beautiful genus; the roots of *O. Umbellatum* are eaten boiled, in the Levant and in Palestine. It is supposed, by Linnæus, that the doves' dung mentioned in Scripture, as fetching so high a price during the siege of Samaria, was this plant, as the flower in the mixture of its colour bears some resemblance to the dung of those birds. The English name, *Star of Bethlehem*, is derived from the frequency of the plant in the Holy Land.

XXIX. *SCIL'LA*, from *σκιλλω*, to disquiet; it being an emetic. Nat. ord. *Linn.* Coronariæ. *Juss.* Asphodeli. 16 Species.

1. *S. Mari'tima. Officinal Squill, or Sea Onion.* "Flowers naked; floral leaves bent back, root coated," globular, ragged at the top, outer skin pale, whitish, or else purplish red; flowers much earlier than the leaves, in a long dense spike; corolla white, anthers green; leaves numerous, large, oblong. May. South of Europe. P. Gr. Ho.



2. S. Li'llo Hyacin'thus. *Lily rooted Squill*. "Cluster few flowered; leaves lanceolate, pressed close to the ground; bulb scaly;" flowers from six to nine, light blue. This plant, it seems, is now not to be found in English gardens. May to July. Spain. 1596. P.

3. S. Ita'lica. *Italian Squill*. "Cluster conical, oblong; floral leaves two or three together, linear;" leaves numerous, linear, flat, triangular at the keel; flowers of a pale and ashy blue, often white. V. Lusitanica is the same plant. April to July. Switzerland. 1605. P.

4. S. Peruvia'na. *Great Corymbose Squill*. "Corymbus many flowered, dense, conical; floral leaves tapering, broad at the base;" leaves many, spreading, oblong, dark green; flowers very numerous, dark blue, with purple stamens and pistil. May. Portugal. 1607. P.

5. S. Amæ'na. *Nodding Squill*. "Scape angular; branching peduncles alternate, shorter than the flower; floral leaves obtuse, short;" leaves flat, bluntish, flaccid; flowers from four to six, of a fine blue, flat, widely spreading. March, April. The Levant. 1596. P.

6. S. Campanula'ta. *Spanish Squill*. "Bulb solid; leaves numerous, lanceolate, rather concave; cluster many flowered, erect; flowers drooping, bell-shaped," deep blue, all turned to one side of the



stalk, varying to white, or flesh-coloured. May, June. Spain. 1633. P.

7. *S. Bifolia*. *Two-leaved Squill*. "Leaves two, lanceolate; cluster somewhat corymbose, of a few erect flowers, without floral leaves;" flowers about four or six, of a rich deep blue, sometimes white or pink. February, April. England. P.

8. *S. Ver'na*. *Vernal Squill*. "Leaves linear, channeled, semi-cylindrical beneath; corymbus hemispherical, of few flowers; floral leaves solitary, ovate, concave, with a bluntish point;" leaves many; flowers from three to six, deep blue; anthers blue. April, May. Britain. P.

9. *S. Autumnalis*. *Autumnal Squill*. "Leaves linear, few, channeled, recurved; cluster many flowered; peduncles without floral leaves, and curled upwards;" leaves numerous; flowers rather small, widely expanded, crimson; anthers darker. August, September. England. P.

10. *S. Hyacinthoides*. *Hyacinth Squill*. "Leaves numerous, oblong, nearly flat; cluster very long; peduncles coloured," blue; floral leaves minute, abrupt, distant; stalk three or four feet high, bearing a long upright cluster of numerous dullish purple flowers. August. Madeira. 1596. P. Gr. Ho.

The most learned botanists are puzzled to distinguish this genus from *Ornithogalum*; but in that the flowers never incline to blue or purple; the tunicated root of *S.*



*Maritima* is the Squill so long known in medicine as a powerful expectorant and diuretic. It sometimes grows as large as the human head.

XXX. PHOR'MIUM, from φορμος, a basket, or panier; the fibres of the leaves being strong and flexible. Nat. ord. *Linn.* Coronariæ. *Juss.* Asphodeli. 1 Species.

1. P. Te'nax. *Flax Lily, or New Zealand Flax Plant.* Stem none; leaves radical, numerous, erect, linear, acute, four or five feet long, tough, rigid; flower-stalks radical; corolla yellow, about an inch and half long; capsule three inches long. Strong and good thread may be manufactured from the fibres of the leaves. July. New Zealand. 1789. P.

XXXI. DRACÆ'NA, from δρακαινα, a female dragon; Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Asparagi. 14 Species.

1. D. Dra'co. *Dragon Tree.* "Arboreous; leaves fleshy, with a thorny point;" stem thick, twelve or fourteen feet high, with circular rings where the leaves have fallen off; crowned with tufts of lanceolate spreading leaves hanging down all round, four or five feet long; flowers white, in large terminal compound spikes; the stem and roots exude a crimson resin, one of those kept in the shops under the name of Dragon's Blood. East Indies. 1640. T. Hot Ho.



XXXII. ASPA'RAGUS, *ασπαράγος*, the young shoot of a plant. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Asparagi. 20 Species.

1. *A. Officina'lis.* *Common Asparagus, or Speerage.* "Stem herbaceous, round, erect; leaves bristly; stipules equal;" root creeping, with thick long fibres; stem erect, branching; leaves in tufts, very narrow; lower stipules triangular, acute, upper ones ovate; peduncles solitary, axillary, pendulous, one or two flowered; flowers yellowish green; in some the stamens, in others the pistil; occasionally abortive; berries red. June to August. England. P.

This most valuable esculent of the kitchen garden is a striking proof of the improvement effected by cultivation; the plant being in its wild state not thicker than a goose-quill, yet it is well known to be the origin of the luxuriant garden asparagus. The other species of this genus require the protection of the green-house.

XXXIII. GLORIO'SA, from the magnificent splendour of its flowers. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Lilia. 2 Species.

1. *G. Super'ba.* *Superb Lily.* "Leaves furnished with tendrils;" stem herbaceous, about six feet high, having two opposite branches; leaves alternate, smooth; flowers on slender peduncles, hanging down; petals lanceolate, long, waved at the edge, of a most beautiful red and yellow colour. This remarkably



handsome plant requires excessive heat to make it flower. August. East Indies. 1690. P. Hot Ho.

XXXIV. ERYTHRO'NIUM, from *ερυθρος*, red, in allusion to the colour of the flower, or the more unusual blood-like stain on the leaves. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Lilia. 2 Species.

1. E. Dens Ca'nis. *Dog's Tooth Violet*. "Leaves with a blunt flat point, style cylindrical, germ globose, obtuse;" leaves radical, various in breadth, elegantly stained with purple; flower solitary, drooping, crimson or whitish, with dark purple anthers. March. Switzerland. 1596. P.

2. E. America'num. *Yellow-flowered Dog's Tooth Violet*. "Leaves rolled in at the point, style club-shaped;" leaves stained with red; flower deep yellow, spotted with red; anthers yellow. April, May. North America. 1665. P.

XXXV. UVULA'RIA, said to be from the likeness of the inflorescence to the uvula of the human throat; though this resemblance is not easily made out. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Lilia. 6 Species.

1. U. Amplexifo'lia. *Heart-leaved Uvularia*. "Leaves heart-shaped, clasping the stem, entire, smooth edged;" stem erect, herbaceous, branched, leafy; leaves alternate, sessile, pointed, ribbed; flowers pendulous, greenish yellow, small; peduncles solitary, axillary, one flowered. This plant by modern



authorities is now called *Streptopus Amplexifolius*. May, Germany. 1752. P.

2. *U. Perfolia'ta*. *Perfoliate Uvularia*. "Leaves perfoliate, elliptical, obtuse, with a small point; corolla bell-shaped, rough on the inside; nectary linear;" stem solitary, a little branched; flowers terminal, solitary, stalked, pendulous, of a pale greenish buff colour. May, June. North America. 1700. P.

3. *U. Grandiflo'ra*. *Large Yellow Uvularia*. "Leaves perfoliate, oblong, acute, wavy at the base; petals smooth on both sides, nectary roundish;" plant nearly twice the size of the last; flowers yellow; petals an inch and half long, ribbed. April. May. North America. 1802. P.

4. *U. Sessilifo'lia*. *Sessile-leaved Uvularia*. "Leaves sessile, egg lance-shaped, glaucous beneath; petals smooth on both sides, nectary oblong;" stem smooth, purplish; corolla pale yellow. June. North America. 1790. P.

XXXVI. FRITILLA'RIA, from *fritillus*, which some have taken for a chess-board; alluding to the chequered nature of the petals; yet the Latin word certainly means a dice box. Nat. ord. *Linn.* *Coronariæ*. *Juss.* *Lilia*. 6 Species.

1. *F. Imperia'lis*. *Crown Imperial*. "Cluster of many flowers, crowned with leaves, the stalk naked immediately below it," but leafy two-thirds from the bottom; leaves entire, plant of quick growth, fœtid;



two to three feet high, succulent, of a shining green; flowers drooping, large, orange or lemon coloured, or red; fruit erect. March, April. Persia. 1596. P.

2. *F. Persica*. *Persian Fritillary*. "Cluster nearly naked; leaves oblique," twisted, glaucous; flowers in a loose spike at the top of the stem, forming a pyramid, numerous, dull purple. May. Caucasus. 1596. P.

3. *F. Pyrenaica*. *Pyrenean Fritillary*. "Lower leaves opposite; some of the flowers having a leaf interposed between them; petals recurved at the top;" plant about a span high; leaves five to seven, glaucous, leathery; petals tawny, purple, internally yellow, and at the tip. May, June. The Pyrenees. 1605. P.

4. *F. Melea'gris*. *Common Fritillary, Chequered Daffodil, Snake's Head*. "Leaves alternate, linear, channeled; stem single flowered, petals slightly curved, nectary linear;" stem a foot high, simple; flowers pendulous, chequered with purple, white, or yellow, on a red ground; petals gibbous at the base. March to May. England. P.

5. *F. Latifolia*. *Broad-leaved Fritillary*. "Leaves egg lance-shaped, obtuse, the upper ones crowded; stem single flowered; petals slightly incurved, nectary oblong;" flower larger, less regularly chequered than the last; leaves broad, less glaucous. April. Caucasus. 1604. P.



These curious and beautiful plants are all of them hardy, and highly deserving of a place in the best gardens.

XXXVII. *LILIIUM*, a name of rather obscure origin; by some derived from λείος, smooth, or handsome. Nat. ord. *Linn.* Coronariæ. *Juss.* Lilia. 16 Species.

1. *L. Can'didum.* *Common White Lily.* "Leaves lanceolate, scattered, attenuated at the base; corolla bell-shaped, smooth in the inside;" stem firm, upright; leaves numerous, smooth, sessile; petals of a shining beautiful white, with ridges on the outside; flowers sometimes nodding. July. The Levant. 1596. P.

2. *L. Japo'nicum.* *White Japan Lily.* "Leaves lanceolate, scattered; corolla drooping, somewhat bell-shaped;" it differs from the former in the flower being solitary, stem weaker; leaves fewer, on footstalks, long, nerved, remote; flower white, drooping. July. August. China. 1804. P.

3. *L. Bulbiferum.* *Bulb-bearing or Orange Lily.* "Leaves linear, lanceolate; scattered; corolla bell-shaped, erect, glandular, rough on the inside, downy without;" stem upright, scored, angular; upper leaves spreading, and having a roundish bulb at their base, either purplish, or pale green; flowers large, handsome, red or orange colour, paler on the outside, inodorous; anthers purple; it varies in size, leaves, and flowers. June, July. Austria. 1596. P.



4. *L. Catesbæ'i*. *Catesby's Carolina Lily*. "Leaves scattered, linear, lanceolate; stem one-flowered, corolla erect; petals with claws, waved at the margin, reflexed at the tip;" this is the smallest Lily cultivated in England; stem about a foot high, purple, slender, with a slight bloom upon it; claws of the petals green, borders dusky yellow, the rest orange, varying to yellow or red. August. Carolina. 1787. P.

5. *L. Tigrinum*. *Tiger spotted Chinese Lily*. "Leaves scattered, sessile, five nerved, upper ones egg heart-shaped; petals rolled back, inner side covered with fleshy dots;" stem from two to five feet high; flowers large, of a bright red lead colour, with black crimson raised spots; bulbs produced on the axils of the leaves. July, August. China. 1804. P.

6. *L. Pompo'nium*. *Pomponé Lily*. "Leaves scattered, awl-shaped, almost triangular; flowers turned back, petals of the corolla rolled back;" stem dividing into four or five peduncles, each bearing a flower of a fine carmine, with a few scattered dark spots: there is a variety of this with higher stems, branched; each stalk sustaining from fifteen to thirty flowers, bright red, or pale and yellowish. May, June. The Pyrenees. 1620. P.

7. *L. Chalcedo'nicum*. *Scarlet Martagon Lily*. "Leaves scattered, linear, lanceolate; flowers reflexed; petals rolled back, spotted within;" stem from three to four feet high; leaves broader than the



- last, somewhat edged with white, placed close upon the stem all the way up; flowers of a bright scarlet, seldom more than five or six. July. The Levant. 1596. P.

8. L. Superbum. *Superb Martagon Lily*. "Lower leaves whorled, the rest scattered; flowers in a branched pyramid, turned back; petals rolled back;" stem round, two to three feet high, much branched; flowers large, handsome, one at the end of each branch, red or yellow, with dark spots; the whole forming a sort of pyramid; their smell is disagreeable. June to August. North America. 1727. P.

9. L. Martagon. *Purple Martagon Lily, Turk's Cap Lily*. "Leaves in whorls, egg lance-shaped; flowers reflexed; petals rolled back;" stem strong, three to four feet high; leaves broad; flowers dark purple, with some spots of black, in loose spikes. June, July. Hungary. 1596. P.

10. L. Canadense. *Canada Martagon Lily*. "Leaves in whorls; flowers reflexed; corolla bell-shaped; petals turned back;" stems from four to five feet high; leaves oblong, pointed; flowers large, yellow spotted with black, numerous, sometimes reddish; petals bent back at the tips only. July, August. North America. 1629. P.

11. L. Kamschatcense. *Kamschatka Lily*. "Leaves in whorls; flowers erect; corolla bell-shaped; petals sessile;" stem a foot high; leaves lance-shaped, linear, sessile, four or six scored; flowers few, small; petals



blunt, scored, purple, not rolled back; stigmas without a style. May to July. Kamschatka. 1759. P.

12. *L. Philadelphicum. Philadelphian Lily.* "Leaves in whorls; flowers erect; corolla bell-shaped; petals with claws;" leaves short, obtuse; stem terminated by two flowers; petals red and yellow, spotted towards their base with darkish red or purple. July. North America. 1757. P.

*L. Candidum*, the White Lily, has from time immemorial been celebrated by poets, as affording metaphor and comparison in describing female beauty; nor does it yet appear to have lost its merits. The flowers are highly fragrant and elegant; it is, unquestionably, the Lily of the Old and New Testament, being a native of Palestine.

XXXVIII. *TU'LIPA*, from *tulipan*, or *turban*, the Eastern head dress. Nat. ord. *Linn.* *Coronariæ.* *Juss.* *Lilia.* 5 Species.

1. *T. Sylves'tris. Wild Tulip.* "Flower solitary, somewhat drooping; leaves lanceolate; stigma triangular, slightly three-cleft; stamens hairy at the base; petals acute, hairy at the tip;" stem leafy in the middle; leaves about three, lanceolate; flower yellow, sweet-scented; three outer petals greenish at the back; stamens yellow. April, May. England. P.

2. *T. Suavé'olens. Early Dwarf Tulip.* "Stem single flowered, downy; flower erect; leaves egg lance-shaped, downy above; petals obtuse, smooth;" plant glaucous; flower broad, bell-shaped, sweet-scented; petals scarlet, edged with yellow. March,



April, but in the house January. South of Europe. 1603. P.

3. *T. Gesneria'na*. *Common Garden Tulip*. "Stem one-flowered, smooth; flowers smooth, erect; leaves egg lance-shaped, glaucous, smooth," from three to five; in a wild state the petals are crimson, yellowish at the base: by cultivation they increase in size, and assume in colour every variety of scarlet, yellow, purple, and green, in beautiful streaks and mixtures; anthers commonly black. April, May. The Levant. 1577. P.

It is difficult to distinguish the first species from the early yellow garden Tulip except by its stalk being somewhat downy. *T. Suaveolens* is commonly imported from Holland, where it is called the Duke Van Toll; it makes a pretty appearance in a room, whether growing in water, sand, or earth. The Garden Tulip, so long celebrated, changes into varieties next to infinite; every florist has his catalogue of them, frequently amounting to several hundreds, ranged into names and prices. The perfection of the flower consists in its cup-like form, entireness of the petals at their edge, and the boldness of the stripes and blotches, which should be distinct and abruptly broken, the colours deep and pure. The Tulipomania of the Dutch, is well known, but at the time it was carried to its greatest excess it became mere gambling, without any sort of regard to the quality of the object.

XXXIX. *YUC'CA*, the name of the plant in the language of the original inhabitants of America. Nat. ord. *Linn. Coronariæ*. *Juss. Lilia*. 4 Species.



1. Y. Glorio'sa. *Superb Adam's Needle*. "Leaves lanceolate, straight, furrowed, edges very entire;" stem in England seldom higher than two feet, branched, thick, tough, crowned at the summit of each branch with a profusion of crowded leaves, spreading in every direction, a foot and a half long, pointed, with a spine; panicle terminal, erect, of many drooping flowers, whitish, tinged at the base and points with crimson, scentless. July, August. Both Americas. 1596. E. S.

2. Y. Alofo'lia. *Aloe-leaved Adam's Needle*. "Leaves linear, lanceolate, straight, edges bordered with fine callous notches;" stem ten to twelve feet, the upper part set thickly with leaves, straight spreading all round, the lower ones pointing downwards; panicle dense, from two to three feet long; flowers while externally tinged with a fine purple. August, September. South America. 1696. E. S. Gr. Ho.

3. Y. Draco'nis. *Drooping-leaved Adam's Needle*. "Leaves linear, lanceolate, even, reflexed, crenate," longer, narrow, more tender than the former, shining, dark green, bending down from the middle; stem about three feet high; flowers in a drooping panicle, numerous, milk white. October, November. South Carolina. 1732. E. S.

4. Y. Filamento'sa. *Thready Adam's Needle*. "Stem none; leaves lanceolate, entire, coarsely thread-like at the edges;" leaves numerous, radical,



spreading, points spinous; flower-stalks solitary, four or five feet high, with numerous reddish brown floral leaves; panicle compound, lax, of numerous large bell-shaped, pendulous, cream-coloured flowers. September, October. Virginia. 1675. E. S.

XL. OPHIOPOGON, from *οφις*, a serpent, and *πογων*, the beard, but the application is not very apparent. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Asparagi. 1 Species.

1. O. Japo'nicus. *Japan Snake's Beard.* A hard grassy plant, with clusters of greenish white flowers, and blue berries; it serves as edges in flower gardens in Japan. June. 1784. P.

XLI. A'CORUS, from *α* privative, and *κορεω*, to purge, it having an astringent quality. Nat. ord. *Linn.* Piperitæ. *Juss.* Aroideæ. 2 Species.

1. A. Ca'lamus. *Sweet Acorus or Flag.* "Point of the scape very long, leafy;" leaves long, sword-shaped, waved along one of the edges, when broken of an aromatic scent; flowers in an oblong cylindrical, green spike proceeding from the side of the stem, at the edge of the leaf. July. England. P.

The dried roots of *Acorus Calamus* have a strong aromatic smell, and a warm pungent taste; it is our only truly native aromatic plant: it never produces its spikes unless it grows in water. A variety from the East Indies and a Chinese species, scarcely differ, except in being somewhat more hot and pungent.



XLII. ORON'TIUM, from *ορων*, to see, on the supposition that the plant is useful to the eye-sight. Nat. ord. *Linn.* Piperitæ. *Juss.* Aroideæ. 2 Species.

1. O. Aqua'ticum. *Aquatic Orontium*. "Leaves egg lance-shaped, floating, stalked," with numerous ribs; spikes solitary, on long stalks, cylindrical, dense, of numerous crowded greenish white flowers; plant growing in the water. June. North America. 1775. P.

2. O. Japo'nicum. *Japan Orontium*. "Leaves sword-shaped, erect, sheathing at the base;" stem none; leaves numerous, leathery, ribbed; spikes on short stalks, solitary, cylindrical, of numerous greenish yellow flowers; petals crowded, their summits broad. February to April. Japan. 1783. P.

*Order Digynia.*

XLIII. ORY'ZA, perhaps from *ορυζω*, to dig. Nat. ord. Gramina. 1 Species.

1. O. Sati'va. *Common Rice*. Root fibrous; herb grassy, about four or five feet high, light green, smooth; leaves linear, narrow pointed; panicle terminal, much branched, many flowered; flowers obovate, gibbous; corolla hairy, curiously dotted. July. Ethiopia. 1596. A. Hot Ho.

Rice, though cultivated abundantly in Italy, can here be preserved only in the stove: it grows in prepared grounds artificially inundated. There are several va-



rieties: the seed has been long in culinary request. What is called Paddy seems to be a sort cultivated on the sides of mountains, and sometimes named Dry or Mountain Rice.

*Order Trigynia.*

XLIV. RU'MEX, by some derived from *rumex*, a spear, the head of which the leaves of some species resemble; by others from *rumo*, to suck, the leaves allaying thirst. Nat. ord. *Linn.* Holoraceæ. *Juss.* Polygonææ. 36 Species.

\* *Flowers perfect, valves bearing a grain.*

1. R. Patien'tia. *Patience Dock, or Rhubarb.*  
 "Valves entire, oblong, one of them swelling in its lower part into an oblong grain; leaves egg lance-shaped, taper pointed;" stem four or five feet high, erect, smooth; flowers in whorls, or tufted clusters, copious, pendulous, herbaceous, green. July. Italy. 1573. \* P.

\*\* *Flowers perfect, valves without grains.*

2. R. Bucephalo'phorus. *Basil-leaved Dock.*  
 "Valves naked, veinless, with hooked teeth; flower-stalks ternate, roughish, dilated and vaulted when in fruit:" a plant sometimes cultivated for its curious structure; stalks slender, branching, about four inches high, lower part with small succulent leaves; flowers in spikes, three together, nodding, red; stipules long, white, membranous. June. Italy. 1683. A.

3. R. Vesica'rius. *Bladder Dock, or Sorrel.*



"Valves very large, membranous, entire, folded back; leaves undivided; stalks mostly in pairs;" stem branched; leaves on long stalks, somewhat halbert-shaped; flowers in loose spikes, herbaceous; valves netted with veins, pinkish, beautiful. August. Africa. 1656. A.

4. R. Ro'seus. *Rose-coloured Dock*. "Valves unequal, membranous, rounded, veined, toothed; leaves undivided," on long stalks, entire, slightly halbert-shaped; herb roughish, with a sort of mealiness; flowers in loose spikes; flower-stalks, petals, and valves of an elegant rose-colour. July, August. Egypt. 1737. A.

5. R. Scuta'tus. *French or Garden Sorrel*. "Leaves heart halbert-shaped; stem round;" leaves very smooth, somewhat glaucous, quite entire, on long stalks; flowers small, clustered, pendulous; valves roundish, large, pink. June, July. France. 1596. P.

\*\*\* *Stamens and pistils on separate flowers.*

6. R. Alp'inus. *Alpine Dock, or Monk's Rhubarb*. "Flowers either perfect or monœcious; valves entire, naked; leaves heart-shaped, obtuse, wrinkled;" foot-stalks very long; stipulas membranous, sheathing; stem two feet high, erect, leafy, round; foliage of a rich green, ample, clusters forming a dense panicle of innumerable green flowers. June, July. Switzerland. 1597. P.

7. R. Spino'sus. *Prickly-seeded Dock*. "Flowers



monœcious; calyx of the female flowers of one leaf, pitcher-shaped, with three spreading spinous points;" stem decumbent; leaves somewhat halbert-shaped, stalked, spreading; tufts of female flowers sessile, tufts of male flowers much fewer, leafless, stalked and drooping, their petals larger; herb with the aspect of Beet. July. Candia. 1656. A.

8. R. Aceto'sa. *Common Sorrel*. "Diœcious; male and female flowers on separate plants; valves bearing a grain; leaves oblong," arrow-shaped, lower ones stalked, upper sessile; clusters of flowers aggregate, reddish. June, July. Britain. P.

9. R. Luna'ria. *Tree Sorrel*. "Flowers monœcious; valves even; stem arboreous; leaves somewhat heart-shaped;" stem about ten feet high, sending out many branches; leaves on foot-stalks; flowers in loose panicles of an herbaceous colour; seeds triangular. July. The Canary Islands. 1698. S. Gr. Ho.

This is a numerous genus of hardy plants, nearly allied to Rheum, or Rhubarb; they have small pretensions to be considered as ornamental. The first species was long cultivated in rustic gardens as a pot-herb, and also for its purgative qualities, but it is inferior in its powers to the Alpine Dock. The leaves of Common Sorrel are gratefully acid, but yet less so than the French Sorrel, which is preserved for kitchen use in soups, &c. for which it is much cultivated in France. The English Great Water Dock was formerly thought to possess anti-scorbutic virtues, but is now entirely neglected. Few species, either native



or foreign, are admitted into gardens if by any means they can be kept out, as they scatter their seeds with such profusion as to become troublesome weeds.

XLV. COL'CHICUM, from Colchis, a country near the Euxine Sea, where it is said to be common. Nat. ord. Linn. Spathaceæ. Juss. Junci. 3 Species.

1. C. Autumnale. *Common Meadow Saffron*. "Leaves flat, lanceolate, erect;" root bulbous, abounding in a milky juice; flowers purplish, appearing in Autumn without stem or leaves; tube of the corolla very long; leaves appearing in the ensuing Spring, a foot long, dark green, sheathing; capsules rising with the leaves, and ripening the seeds in May; flower sometimes double. September. Britain. P.

2. C. Byzantinum, or Montanum. *Broad-leaved Meadow Saffron*. "Leaves linear, spreading widely," coming out soon after the flower, in Autumn, and continuing all the Winter, at first nearly egg-shaped, but growing narrower; flowers reddish, purple, marked with lines, border deeply divided. September. The Levant. 1629. P.

3. C. Variegatum. *Chequer-flowered Meadow Saffron*. "Leaves undulated, spreading," appearing soon after the flowering is over, three in number, of a fresh green, broad at the base, pointed; flowers whitish, beautifully marked with purple spots. September, October. The Levant. 1629. P. Gr. Ho.



The first species is remarkable for the singularity of its fructification: it is, without doubt, of a poisonous nature, but has been introduced into medicine with great success, possessing somewhat the properties of the Squill: it is supposed to be a principal ingredient in the celebrated French gout medicine, *Eau Medicinal*.

XLVI. MEDE'OLA, diminutive of *Medea*, the celebrated enchantress. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Asparagi. 3 Species.

1. *M. Virg'nica*. *Virginian Medeola, or Indian Cucumber*. "Leaves in whorls; branches unarmed;" stem about a foot high, covered with a reflexed down; leaves ovate, pointed, from six to eight in the upper, and three in the lower whorl; flowers on drooping stalks, greenish yellow, scentless; its root, which is eaten by the Indians, is said to resemble the Cucumber in flavour. June. Virginia. 1759. P.

XLVII. HELO'NIAS, derivation quite unknown. Nat. ord. *Linn.* Coronariæ. *Juss.* Junci. 4 Species.

1. *H. Bulla'ta*. *Spear-leaved Helonias*. "Leaves egg lance-shaped, ribbed;" stalk radical, scaly; cluster dense, ovate; leaves radical, spreading, smooth; flowers many, dullish crimson, with blue anthers, inodorous: the plant at a distance has the appearance of an Orchis. April, May. Pennsylvania. 1758. P.



2. *H. Asphodeloi'des.* *Grass-leaved Helonias.* "Leaves linear, awl-shaped, rough edged;" stalk leafy; leaves numerous, long, acute, narrow; cluster of innumerable white flowers with yellow anthers; it blossoms but rarely in England. June. North America. 1765. P.

3. *H. Lu'tea.* *Spiked-flowering Helonias.* "Radical leaves egg lance-shaped; stem leaves linear, lanceolate," sessile, both ribbed; cluster of flowers dense, composed of numerous small yellow flowers; stem simple. This plant was formerly reckoned a *Veratrum*. July, August. North America, 1759. P.

XLVIII. *TRILLIUM*, a name not altogether explained, but certainly alluding to the triple number of the parts in this genus. Nat. ord. *Linn.* *Sarmentaceæ.* *Juss.* *Asparagi.* 9 Species.

1. *T. Cérnum.* *Drooping Trillium.* "Peduncles reflexed; petals lanceolate, reflexed; leaves rhomboid, abruptly pointed, on very short stalks;" flower white, with green ribs; anthers and style purple; berries purple; stem simple, erect, from one to two feet high. April, May. North America. 1758. P.

2. *T. Erec'tum.* *Upright Trillium.* "Peduncles erect; petals elliptical, spreading; leaves rhomboid, pointed, sessile;" corolla purplish brown; stamens purple; berry almost black; stem taller, and flowers



larger than in the former. April, May. North America. 1759. P.

3. *T. Grandiflorum*. *Large-flowered Trillium*. "Flower and its stalk drooping; petals ovate, the claws converging into a tube; border spreading; leaves ovate, somewhat rhomboid, pointed;" corolla snowy white, veined; anthers yellow; calyx leaves an inch and a half long. April to June. Upper Canada. 1799. P.

4. *T. Sessile*. *Sessile-flowered Trillium*. "Flower sessile, erect; petals lanceolate, erect, twice the length of the calyx; leaves sessile, broad, elliptic, acute;" stalk purple; corolla chocolate brown; berry purple; leaves mottled. April, May. North America. 1759. P.

XLIX. *TOFIELDIA*, named by Hudson, author of the *Flora Anglica*, in honour of Mr. Tofield, a botanist, resident near Doncaster. Nat. ord. *Linn. Coronariæ*. *Juss. Asphodeli*. 7 Species.

1. *T. Palustris*. *Scotch Asphodel, or Marsh Tofieldia*. "Head of flowers ovate; stem smooth, thread-shaped, leafless; petals obtuse, obovate; germs round;" radical-leaves forming small tufts; flowers small, pale green. This plant is arranged in Linnæus as *Anthericum Calyculatum*: the genus is remarkable among the Liliaceous tribe for having a three-leaved cup or calyx, which some botanists are



disposed to esteem a bracte or floral leaf. April, May. Britain. P.

2. T. Pu'bens. *Downy American Tofieldia*.  
 " Cluster cylindrical, interrupted ; flower-stalks aggregate, rough, the length of the corolla ;" stem rough ; flowers white, erect ; anthers yellow. April, May. North America. 1790. P.



## CLASS VII.

## HEPTANDRIA.

*Order Monogynia.*1. *Flowers complete.*

I. TRIENTALIS. Calyx of seven leaves ; corolla in seven deep equal segments, flat ; berry one celled, juiceless.

II. DISANDRA. Calyx in about seven divisions ; corolla wheel-shaped, with about seven segments ; capsules superior, two cells, many seeds.

III. ÆSCULUS. Calyx of one leaf, four or five cleft, bellying ; corolla four or five petaled, unequal, inserted into the calyx ; capsules three celled, two seeded.

2. *Flowers incomplete.*

IV. CALLA. Spathe spreading ; spadix covered with florets ; corolla none ; berries many seeded.

*Order Tetragynia.*

V. SAURURUS. Calyx a catkin, with single flowered scales ; corolla none ; germens four ; berries four, with solitary seeds.



## CLASS VII.

## HEPTANDRIA.

*Order Monogynia.*

I. TRIENTA'LIS, *trientalis*, the third part of a foot, such being its height. Nat. ord. *Linn.* Rotaceæ. *Juss.* Lysimachiæ. 2 Species.

1. T. Europæa. *Chickweed Winter Green*. "Leaves elliptical;" stem simple, four or five inches high, crowned with a tuft of nearly sessile bright green smooth leaves, veined; flower-stalks axillary, capillary, one flowered; corolla white with yellowish or pale pink anthers and stigma. May, June. Britain. P.

II. DISAN'DRA, of obscure etymology, perhaps from *δύς*, scarcely, and *ἀνδρῶς*, male, alluding to the uncertain number of stamens. Nat. ord. *Linn.* not arranged. *Juss.* Pediculares. 2 Species.

1. D. Prostra'ta. *Trailing Disandra*. "Leaves kidney-shaped, crenate; peduncles in pairs;" stems trailing; flower-stalks axillary, downy; blossoms yellow. The plant varies in the number of all its parts: if placed on a pedestal so that its branches may hang carelessly down, it appears to great advantage. April to August. Madeira. 1774. P. Gr. Ho.



III. *Æs'culus*, from *esca*, food. Nat. ord. *Linn.*  
*Trihilatæ.* *Juss.* *Acera.* 3 Species.

1. *Æ. Hippocas'tanum.* *Common Horse Chesnut.*  
 "Leaves digitate, in seven leaflets; capsules prickly;  
 corolla of five petals;" flowers in large pyramidal  
 bunches, white, variegated with red or yellow towards  
 the centre; upper flowers abortive. May. Asia.  
 1629. T.

2. *Æ. Pa'via.* *Scarlet-flowered Horse Chesnut.*  
 "Leaves digitate, with five smooth unequally serrated  
 leaflets; corolla four petaled; stamens sometimes  
 eight; claws of the petals the length of the calyx:" a  
 tree rising about twenty feet; leaves opposite, on  
 long stalks; flowers from the end of the branches,  
 about five in a cluster, smaller than the former, red,  
 tubular, without a border. June. North America.  
 1711. T.

3. *Æ. Fla'va.* *Yellow-flowered Horse Chesnut.*  
 "Leaves digitate, with five leaflets, equally serrated,  
 downy beneath, at the mid-rib; corolla four petaled;  
 border of the petals cordate, roundish; claws twice  
 the length of the calyx;" flowers yellow. June. North  
 Carolina. 1764. T.

The first species is a superb tree, but to appear in full  
 perfection it should be planted singly; it is of quick  
 growth. Deer are remarkably fond of the nuts, which in  
 Turkey are ground and mixed with the provender of  
 horses; they are said to make a tolerable substitute for  
 starch.



IV. CAL'LA, from καλλος, beautiful. Nat. ord. *Linn.* Piperitæ. *Juss.* Aroidæ. 3 Species.

1. C. *Æthio'pica.* *Æthiopian Calla.* "Leaves heart arrow-shaped, spathe cowed; stamens placed above the pistils;" leaves in clusters from the roots, shining green, on long stalks, spathe white, fleshy, twisted at the bottom; spadix cylindrical, yellowish; stamens above, pistils below, set so closely together as not easily to be distinguished. January to May. The Cape. 1731. P. Gr. Ho.

2. C. *Palus'tris.* *Marsh Calla.* "Leaves heart-shaped, spathe flat, stamens and pistils intermingled with each other;" leaves stalked, pointed; stipules two at the base of the foot-stalks; spathe roundish, egg-shaped, rolled up at the end in a bluntish spine, yellowish green below, white above; spadix egg-shaped, obtuse; stamens white. The plant will thrive only in water. July. North of Europe. 1768. P.

*Order Tetragynia.*

V. SAURU'RUS, from σαυρα, a lizard, and ουρα, a tail; alluding to the shape and scaly appearance of the long taper spike of flowers. Nat. ord. *Linn.* Piperitæ. *Juss.* Naiades. 1 Species.

1. S. *Cer'nuus.* *Drooping Lizard's Tail.* An aquatic plant, stems rising a foot above the water, simple, round, leafy; leaves alternate, stalked, heart-shaped, smooth, ribbed; spikes solitary, towards the top of the stalk; about two inches long, recurved, greenish white. September. Virginia. 1759. P.



## CLASS VIII.

## OCTANDRIA.

*Order Monogynia.**1. Flowers complete.*

I. TROPÆOLUM. Calyx of one leaf, with a nectariferous spur behind; corolla of four petals, unequal; berries three, dry, leathery.

II. EPILOBIUM. Calyx in four deep segments; petals of the corolla four; capsule oblong, inferior; seeds feathered.

III. GAURA. Calyx four cleft, tubular; corolla of four petals, turned upwards; drupe dry, inferior, four cornered.

IV. ŒNOTHERA. Calyx four cleft; petals of the corolla four; capsule of four cells and four valves, cylindrical, inferior; seeds naked.

V. RHEXIA. Calyx four toothed; petals of the corolla four, inserted into the calyx; anthers declining, beaked; capsule of four cells within the body of the calyx.

VI. KOELREUTERIA. Calyx of five leaves; corolla of four petals, irregular; nectary of four cloven scales and three glands; capsule of three cells, with two seeds in each.



VII. FUCHSIA. Calyx superior, coloured, four cleft, bearing the corolla; petals four; berry of four cells, seeds numerous.

VIII. CHLORA. Calyx eight leaved; corolla of one petal, eight cleft; capsule one celled, two valved, many seeded; stigma four cleft.

IX. VACCINIUM. Calyx superior; corolla of one petal; filaments inserted into the receptacle; anthers with two terminal pores; berry four celled, many seeded.

X. MENZIESIA. Calyx one leaf, four or five cleft; corolla of one petal, inflated; filaments inserted into the receptacle; capsule superior, four or five celled; partitions formed by the reflected margins of the valves.

XI. ERICA. Calyx of four leaves; corolla four cleft, permanent; filaments inserted into the receptacle; anthers before flowering connected by two lateral pores; capsule superior, of four cells, and many seeds.

VII. *Æsculus pavia.* X. *Ruta graveolens.*

XXIII. *Acer.*

## 2. *Flowers incomplete.*

XII. DIRCA. Calyx none; corolla tubular, with a slight unequal border; stamens and style longer than the corolla; drupe with one seed.

XIII. DAPHNE. Calyx none; corolla four cleft,



funnel-shaped, withering, inclosing the stamens; drupe of one seed.

XIV. STELLERA. Calyx mostly four cleft; corolla none; stamens very short; nut solitary, beaked.

*Order Digynia.*

XV. MÆHRINGIA. Calyx inferior, of four leaves; petals of the corolla four; capsule of one cell, and four valves.

X. *Chrysosplenium*—*Scleranthus*. XXI. *Quercus*—*Corylus*.

*Order Trigynia.*

XVI. POLYGONUM. Calyx in five deep segments, coloured, corolla-like, permanent; seed one, angular, superior, covered by the calyx; stamens and styles uncertain in number.

*Order Tetragynia.*

XVII. ADOXA. Calyx two cleft, inferior; corolla four or five cleft, superior; berry four or five celled, united with the calyx.

XVIII. PARIS. Calyx of four leaves; petals of the corolla four, narrower than the calyx; berry superior, of four cells.



## CLASS VIII.

## OCTANDRIA.

*Order Monogynia.*

I. **TROPÆOLUM.** Diminutive of *tropæum*, a war-like trophy. Alluding to its shield-like leaves and blood-stained petals. Nat. ord. *Linn.* Trihilatæ. *Juss.* Undetermined. 5 Species.

1. **T. Mīnus.** *Small Indian Cress.* "Leaves peltate, slightly wavy, their angles bristle-pointed; petals acute;" stems branched, lax, twining; leaves scattered, foot-stalks long; flowers fragrant, axillary, solitary, on long stalks; corolla deep yellow, streaked with orange and red; calyx coloured like the petals. June to October. Peru. 1596. A.

2. **T. Ma'jus.** *Great Indian Cress, or Nasturtium.* "Leaves peltate, wavy, with blunt, naked angles; petals obtuse." This plant is larger in all its parts than the preceding, and has nearly superseded it; its colours and habit the same; a double flowered perennial variety is common in green-houses. June to October. Peru. 1686. A.

The flowers are frequently eaten in salads; they have a pungent warm taste, like the Garden Cress, and hence the plant has its common name Nasturtium. The seeds are pickled, and by some persons used as a substitute for Capers. The first species had for many years disappear-



ed, till re-introduced by Sir J. E. Smith, in 1787. It is said that a sort of electrical flashing may be perceived from these flowers in the evening.

11. EPILO'Bium, from *επι λοβος* *107*, a violet growing upon a pod. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Onagræ. 12 Species.

1. E. Angustifolium. *Rose Bay Willow Herb, Persian or French Willow.* "Leaves scattered, linear, lanceolate, quite entire, veined; flowers unequal;" stem three to six feet high; leaves alternate, running slightly down the stem; flowers purple, showy, growing on a sort of long spike, on purple peduncles; corolla sometimes white. July. August. Britain. P.

2. E. Angustissimum. *Linear-leaved Willow Herb.* "Leaves scattered, linear, obscurely toothed; petals of the corolla equal, entire;" stem woody, a foot and a half high, with a branch from most of the axils; flowers of a lively purple, fewer than in the foregoing, terminating the stem. August. The Alps. 1775. P.

3. E. Latifolium. *Broad-leaved Willow Herb.* "Leaves alternate, lanceolate, ovate; flowers unequal," very large, purple; leaves downy on both sides, not scattered; stem round, erect. July. North of Europe. 1779. P.

4. E. Hirsutum. *Codlings and Cream.* "Leaves ovate, lanceolate, half stem-clasping, hairy; stem branching very much, root creeping;" stem hairy,



purplish ; flowers large, showy, rose-coloured, sometimes white, germ slightly hairy. July. Britain. P.

The remaining species are chiefly natives of Britain, smaller than the foregoing, and not admitted into gardens. *E. Angustifolium* will grow almost every where, even in the confined air of London, being a remarkable instance of a mountainous plant succeeding in the smoke of a city.

III. GAU'RA, from γαυρος, pompous or elated ; being a tall shewy plant. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Onagræ. 3 Species.

1. *G. Bien'nis.* *Biennial Gaura.* "Leaves lanceolate, stem herbaceous, stamens and style pendulous;" stem six or eight feet high, leafy, branched ; leaves alternate, soft, toothed ; flowers numerous, in dense, terminal, corymbose clusters ; petals white, calyx red. August to October. North America. 1762. B.

IV. ŒNOTHE'RA, from οἶνος, wine, and θηρα, a pursuit ; because the dried root acquires the flavour of wine. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Onagræ. 15 Species.

1. *Œ. Bien'nis.* *Common Evening Primrose.* "Leaves ovate, lanceolate, flat ; stem rough, somewhat hairy ; stamens regular, petals undivided ;" stem leafy, rough, angular ; leaves alternate, downy, the lowest stalked ; flowers sessile, axillary, pale yellow,



forming a large spike, expanding towards the evening. June to September. Britain. B.

2. *Æ. Grandiflora. Great flowered Ænothera.* "Leaves ovate, lanceolate; stamens declined;" scarcely different from the preceding; flowers large, stem much more shrubby. June to August. North America. 1778. B.

3. *Æ. Mollissima. Soft Ænothera.* "Leaves lanceolate, waved, downy, very soft;" stem shrubby, about two feet high, hairy; flowers at first pale yellow, changing to an orange colour in their decay; smaller than those of the first species. Buenos Ayres. June to October. 1732. B.

4. *Æ. Sinuata. Scollop-leaved Ænothera.* "Leaves sinuate, toothed; capsules prismatic;" stem simple, a foot high, nodding; leaves sessile, broad, lanceolate, oblique; flowers sessile, germ and calyx hairy; petals yellow, notched. August. North America. 1770. A.

5. *Æ. Tetrap'tera. White flowered Ænothera.* "Leaves lanceolate, toothed, wing cleft at the base; capsules stalked, egg-shaped, four winged;" blossoms expanding in the evening, white; but changing the next day to purple and fading. June to August. Mexico. 1796. A.

6. *Æ. Fruticosa. Shrubby Ænothera.* "Leaves lanceolate, somewhat toothed, acute, capsules stalked, oblong, club-shaped, angular;" stem herbaceous,



not really shrubby, three or four feet high, pale red; leaves tinged with red at their edges; flowers in clusters, large, showy, bright yellow, expanding in the evening, and continuing the next day. June to August. Virginia. 1737. P.

7. *Æ. Pu'mila. Dwarf Ænothera.* "Leaves lanceolate, entire, obtuse; capsules on short stalks, elliptic, angular;" stems ascending, smooth, reddish; leaves light green, with red points, rather blunt; flowers sessile, spiked, small, yellow. May to September. North America. 1757. P.

8. *Æ. Ro'sea. Purple flowered Ænothera.* "Leaves ovate, toothed, lower ones lyrate; capsules club-shaped;" stem upright, smooth, about a foot high; leaves nearly sessile, pointed with red; flowers solitary, on long stalks, bright rose colour. May to August. Peru. 1783. P.

9. *Æ. Purp'rea. Purple flowered Ænothera.* "Leaves glaucous, smooth, lanceolate, entire, narrower at each end, obtuse; capsule sessile, ovate, angular;" stem about two feet high, rather waved, smooth; flowers sessile, spiked, abundant, of a lilac or purple hue. June to August. North America. 1734. A.

Many of the species of this genus are remarkable for the property of expanding their flowers towards the evening. The unfolding of the petals is performed by a jerk, the leaves of the calyx cohering at the top, and being suddenly unhooked by the expansive force of the corolla.



The upper flowers of the spike begin to blossom first. Three or four of the Linnæan species so much resemble *Œ. Biennis*, that they are scarcely to be distinguished.

v. *RHEX'IA*, from *ῥήξις*, a rupture; a plant in Pliny was said to be useful in that infirmity. Why Linnæus chose the name for this handsome American genus, does not appear. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Melastomæ. 17 Species.

1. *R. Virg'nica*. *Virginian Rhexia*. "Leaves sessile, lanceolate, three-ribbed, with fringe-like teeth; calyx fringed with glands;" stem herbaceous, erect, with membranous angles; panicle forked, spreading; flowers large, crimson; anthers large, curved, yellow; calyx brown. August. North America. 1704. P.

2. *R. Maria'na*. *Maryland Rhexia*. "Leaves sessile, lanceolate, three-ribbed, fringed with soft hairs; hairs of the calyx in stars;" the plant thickly set with stinging hairs; stalk dividing at top, each division bearing one or two flowers, with a sessile flower on the stalk; corolla purple, light red or pale. June to August. North America. 1759. P.

vi. *KOELREUTER'IA*, in honour of Dr. Koelreuter, Professor of Natural History at Carlsruhe. 1733. Nat. ord. *Linn.* Trihilatæ. *Juss.* Sapindi. 1 Species.

1. *K. Panicula'ta*. *Panicked Koelreuteria*. Stem arboreous, branched, about six feet high; leaves on



long channeled foot-stalks, unequally pinnate; leaflets about six pair, ovate, serrate; panicles terminating, more than twice compound; flowers three or more on each partial stalk, greenish, inconspicuous. August. China. 1763. S.

VII. FUCHSIA, in honour of Leonard Fuchsius, a German Botanist and Physician. Died 1566. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Onagræ. 4 Species.

1. F. Coccinea. *Scarlet Fuchsia*. "Flower-stalks axillary, longer than the leaves, drooping; leaves opposite, or whorled, stalked, ovate, toothed, smooth; teeth of the calyx as long as its tube;" stems from three to six feet high, much branched, smooth; leaves with red veins, calyx scarlet; petals violet, obovate, blunt; stamens and style hanging far out of the flower, berry dark purple, petals of the corolla rolled together in the centre of the flower; the whole very beautiful; when gathered the plants wither remarkably soon. May to October. Chili. 1788. Gr. Ho. S.

VIII. CHLO'RA, from *χλωροί*, green, or pale; the flowers being of a pale yellow colour. Nat. ord. *Linn.* Rotaceæ. *Juss.* Gentianæ. 5 Species.

1. C. Perfoliata. *Yellow Centaury*. "Leaves perfoliate;" stem from three inches to three feet high, forked near the top; leaves entire, egg-shaped,



acute; flowers from the fork of the stem, stalked, solitary, yellow; stigma red; whole herb glaucous, intensely bitter. June to August. Britain. B.

IX. VACCINIUM, from *ουακινιον*, in the Æolic dialect, hyacinthine, on account of its dark purple berries. Nat. ord. *Linn.* Bicornes. *Juss.* Ericæ. 27 Species.

\* *With leaves deciduous.*

1. V. Myrtillus. *Common Bilberry or Bleaberry.* "Stalks solitary, single flowered; leaves deciduous, serrate, ovate, smooth; stems acutely angular; calyx scarcely divided;" stem from one to two feet high, erect, bushy, smooth; leaves veined, paler beneath; flowers pendulous, flesh-coloured; berry blueish black, acid, eaten in tarts. April to June. Britain. S.

2. V. Stamineum. *Green-wooded Whortle Berry.* "Clusters downy, bractes as long as the flowers; anthers twice as long as the spreading, bell-shaped corolla; leaves elliptic, acute, entire, glaucous;" stem firm, about two feet high; branches numerous; flowers copious, white, with tawny anthers; berries greenish or white; called in America Deer Berries. June. North America. 1772. S.

3. V. Uliginosum. *Great Bilberry.* "Stalks somewhat aggregate, single-flowered; leaves deciduous, obovate, entire, smooth; branches round;" leaves smooth above, veiny and glaucous beneath, quite en-



tire; flowers drooping, flesh-coloured; anthers long, awned; berry large, black. May. Britain. S.

4. V. Diffu'sum. *Shining-leaved Whortle Berry*. "Flower-stalks axillary and solitary, or in bunches; leaves ovate, acute, slightly serrated, polished above, downy beneath; corolla bell-shaped, acute;" a large shrub, sometimes twenty feet high; flowers white, tinged with red; berries globular, black. May to July. North America. 1765. S.

5. V. Dumo'sum. *Bushy Whortle Berry*. "Clusters downy, with oval floral leaves; peduncles axillary, solitary, one-flowered; leaves obovate, pointed, entire, downy, viscid;" a low bushy shrub; corolla white, tinged with pink, rather large; berries globular, black. June. North America. 1774. S.

6. V. Fusca'tum. *Cluster-flowered Whortle Berry*. "Cluster naked; corolla cylindric, ovate; calyx acute; leaves elliptic, acute, entire, veins somewhat downy beneath;" a tall shrub, about seven feet high; corolla white, or reddish; stamens ten, downy; berries black, insipid. V. Corymbosum, V. Virgatum, and V. Amænum, are very slight varieties of this. June. North America. 1770. S.

7. V. Frondo'sum. *Blunt-leaved Whortle Berry, or Blue Tangles*. "Clusters lax; floral leaves obovate, stalked; leaves oblong, pointless, entire, smooth; corolla roundish, bell-shaped;" a shrub about three feet high; flowers small, white, drooping; berries large, blue, globular, eatable. V. Venustum seems



only a variety of this. June. North America. 1761. S.

8. *V. Resinosum*. *Clammy Whortle Berry*. "Clusters leafless, viscid, downy; floral leaves lance-shaped; leaves egg lance-shaped, bluntish, covered with resinous dots;" calyx in five deep segments; a shrub from two to four feet high; clusters lax, drooping; flowers small, tawny, of greenish yellow; calyx brown, large. June. North America. 1772. S.

9. *V. Tenellum*. *Gale-leaved Dwarf Whortle Berry*. "Flowers in dense sessile tufts; leaves nearly sessile, egg lance-shaped, pointed, serrate, smooth, except at the rib and margin;" a low branching shrub; flowers pale red, calyx green; berries large, blueish black, sweet, agreeable. June. North America. 1772. S.

10. *V. Arctostaphylos*. *Madeira Whortle Berry*. "Flowers in bunches; leaves slightly crenate, ovate, acute, stem arboreous;" corolla large, pale green, with a purple tinge; berries black, juicy, eatable; floral leaves at the base of the flower-stalks, calyx five-lobed. July. Madeira. 1777. Gr. Ho. S.

11. *V. Buxifolium*. *Box-leaved Whortle Berry*. "Clusters axillary, of few flowers; leaves stalked, obovate, toothed, or crenate, smooth on both sides; stems tufted;" corolla roundish, ovate; filaments glandular, stigma headed; a pretty little shrub; flowers five cleft, white, delicately striped with red. May, North America. 1796. S.



\*\* *With leaves evergreen.*

12. *V. Crassifolium*. *Thick-leaved Whortle Berry*. "Clusters lateral and terminal, corymbose; floral leaves shorter than the flower-stalks; leaves elliptic, crenate, smooth; stem diffuse;" a trailing species; leaves not an inch long; flowers bell-shaped, five cleft, variegated with pink and white, drooping; flower-stalks red, corymbose. June, July. Carolina. 1787. S.

13. *V. Vitis Idæ'a*. *Red Whortle Berry, Cow Berry*. "Clusters terminating, nodding; leaves obovate, revolute, toothed, dotted beneath;" stem about a span high; leaves somewhat like those of box, but darker; flowers bell-shaped, pale pink, four cleft; berries red; excellent in a rob or jelly. April to June. Britain. E. S.

14. *V. Oxycoc'cus*. *Common Cranberry*. "Corolla four-left; leaves ovate, entire, revolute, acute, smooth; stems creeping, thread-form;" flowers terminal; branches scattered, reddish, leafy; flower-stalks few together, somewhat corymbose, each bearing a solitary flower, drooping, pink; filaments purple, downy; anthers yellow; berry pear-shaped or globular, crimson or spotted. May, June. Britain. E. S.

15. *V. Hispidulum*. *Hairy-stemmed American Cranberry*. "Stem creeping, hispid; leaves roundish, oval, acute; flowers four-cleft, axillary, solitary, sessile;" stem tiled with bristle-shaped scales; corolla



bell-shaped, pinkish ; berries white, sweet, agreeable to eat. June. North America. 1776. S.

16. *V. Macrocarpon*. *American Cranberry*. "Corolla deeply four-cleft; leaves elliptic, oblong, entire, slightly revolute, obtuse, smooth; stems ascending, flowers lateral;" a larger plant than our common Cranberry; berries larger, of a brighter red; corolla reddish-white, filaments short, anthers long. May, June. North America. 1760. E. S.

These shrubs are difficult to cultivate, as they require a boggy soil, which for some of the species must be covered with moss, and constantly kept wet. Cranberries are in general use for making tarts; vast quantities are imported from America: they are not, however, so much esteemed as those from Russia. If dried a little in the sun, and stopped closely in bottles, this fruit will keep several years. In autumn the moor game live chiefly upon bilberries, the product of *V. Myrtillus*: by some botanists *V. Hispidulum*, is arranged as *Arbutus Thymifolia*; its fruit is not equal to that of *V. Macrocarpon*.

X. *MENZIESIA*, from Mr. Archibald Menzies, a botanist, who accompanied Captain Vancouver in his voyage round the world. Nat. ord. *Linn. Bicornes. Juss. Rhododendra.* 1 Species.

1. *M. Polifolia*. *Irish Menziesia*. "Calyx in four deep segments, flowers clustered; leaves ovate, densely downy, snow-white beneath;" stems shrubby, bushy; leaves numerous, stalked, with axillary tufts of smaller leaves; flowers large, purplish red, ovate,



drooping in a long bunch; often cultivated amongst other shrubs which thrive in a boggy soil. It was formerly reckoned an *Erica*, or Heath. June to September. Ireland. S.

XI. *ERI'CA*, from *εριξω*, to break; it having the supposed quality of being a remedy for the stone. Nat. ord. *Linn.* Bicornes. *Juss.* *Ericæ*. 137 Species.

1. *E. Vulga'ris*. *Common Heath, Ling, or Hether*. "Anthers awned, style projecting, corolla four parted; leaves opposite, spurred;" calyx double, the outer of four very small green leaflets, the inner of four rose-coloured leaflets, concealing the corolla; of the same colour, sometimes white; stem much branched above; leaves disposed in a quadrangular form. In Scotland this plant will rise to the height of six feet. June to August. Britain. E. S.

2. *E. Car'nea*. *Early flowering Dwarf Heath*. "Leaves ternate, or quaternate; floral leaves in the middle of the flower-stalk; corollas conical," directed all one way; style projecting; leaves covering the stem, deciduous, having a prominent nerve; calyx and corolla pale purple. January to April. North of Italy. 1763. S.

3. *E. Mediterra'nea*. *Mediterranean Heath*. "Leaves in fours or fives; floral leaves above the middle of the flower-stalks; corolla pitcher-shaped;" style projecting; leaves spreading; flowers scattered;



branches whitish; corolla double the length of the calyx, both coloured. March to May. Portugal. 1648. E. S.

4. E. Va'gans. *Cornish Heath*. "Leaves in fours or fives; corolla bell-shaped; flowers axillary, crowded; flower-stalks the same length as the corolla;" anthers awnless, projecting with the style; leaves smooth, spreading; corolla red, sometimes white. July, August. England. S.

5. E. Multiflora. *Many-flowered Heath*. "Leaves in fives, corolla bell-shaped, border inflexed, flower-stalks twice the length of the corolla;" flowers scattered, style projecting; stem nearly six feet high; leaves obtuse, spreading, gibbous at the base; flowers purplish. June to November. South of France. 1731. E. S.

6. E. Cine'rea. *Fine-leaved Heath*. "Anthers crested, leaves in threes, style slightly projecting, corolla ovate;" leaves smooth, clusters terminating; flowers blueish purple, sometimes white; stigma headed. June to September. Britain. S.

7. E. Te'tralix. *Cross-leaved Heath*. "Anthers awned, floral leaves near the calyx; leaves in fours, fringed, glandular;" flowers in a head, style not projecting; corolla ovate; leaves spreading; flowers inflated, flesh-coloured, sometimes white. June to August. Britain. E. S.

8. E. Cilia'ris. *Fringed Heath*. "Anthers not awned; leaves in threes, ovate, fringed;" clusters



pointing one way; corolla fig-shaped; style projecting; leaves reflex, spreading very much; raceme terminating in three whorls; corolla white, anthers purple. July to September. Portugal. 1759. S.

9. *E. Austr'lis*. *Spanish Heath*. "Flowers terminal, floral leaves near the calyx; anthers crested, leaves spreading; corolla cylindric; style projecting;" leaves in threes or fours, linear, obtuse; flowers terminating, two or three nearly sessile; calyx rough; corolla club-shaped, obtuse, three times as long as the calyx, the segments becoming hoary. March to July. Spain. 1769. E. S.

The above species of this immense genus, described as the largest in the system, are all that will thrive without the protection of a green-house. Modern botanists have increased the number of the whole to four hundred; but whether some may not be considered as varieties, and others as hybrids or mules, is doubtful. It is remarkable that no *Erica* has been found in America, and that we have not more than twelve species which are not natives of the Cape: of these latter, now so common in every conservatory, all have been introduced within the last fifty years. A beautiful and interesting assemblage of plants they undoubtedly are; but, from their great number, and the small difference in their specific characters, they can scarcely be studied to advantage, unless with the assistance of well-drawn and well-coloured engravings.

XII. *DIR'CA*, *διρκαια*, is the name of a plant in Dioscorides; but the meaning of the name is unknown.



Nat. ord. *Linn.* Vepreculæ. *Juss.* Thymelææ. 1 Species.

1. *D. Palus'tris.* *Marsh Leather Wood, or Mouse Wood.* Stem five or six feet high, branched; bark smooth and tough as leather; leaves elliptic, stalked, alternate, downy when young; flowers three from each bend, drooping, greenish white; stamens and style projecting. This shrub is not common in gardens, it requires a boggy soil. March, April. Virginia. 1750. S.

XIII. DAPH'NE, from the nymph Daphne, whose metamorphosis is well known; the name was appropriated to this genus because some of the species have the aspect of laurels. Nat. ord. *Linn.* Vepreculæ. *Juss.* Thymelææ. 30 Species.

1. *D. Meze'reum.* *Mezereon or Spurge Olive.* "Flowers sessile, in threes on the stem; leaves lanceolate, deciduous;" a shrub from three to four feet in height; stem putting forth many woody branches; flowers coming out before the leaves, early in the spring, crimson, sometimes white; odorous; berries red. February to April. England. S.

2. *D. Tar'ton-rai'ra.* *Silvery-leaved Daphne, or Tarton-raira.* "Flowers sessile, aggregate, lateral, tiled with scales at the base; leaves obovate, nerved, silky;" a low shrubby plant, sending out weak stalks from the root; leaves small, soft, shining; flowers in thick clusters, bell-shaped, silky white without, yel-



lowish within. May to July. South of France. 1640. S.

3. D. Alpi'na. *Alpine Daphne*. "Flowers sessile, aggregate; leaves lanceolate, obtusish, downy beneath;" stems small, shrubby, upright, leafy, and flowering at the top; flowers in clusters, whitish, sweet scented; berries red. May, June. The Alps. 1759. S.

4. D. Laure'ola. *Common Spurge Laurel*. "Clusters axillary, five-flowered; leaves lanceolate, smooth," very entire, evergreen; stem shrubby, dividing at top into several branches; flowers in small clusters, yellowish green; berries black. January to March. Britain. E. S.

5. D. Pon'tica. *Pontic Spurge Laurel*. "Pedicuncles two-flowered; leaves lanceolate, ovate;" stem about two feet high, branched from the bottom; leaves scattered, evergreen, shining; flowers in pairs, greenish yellow, with a lemon-like odour. April, May. Pontus. 1752. E. S.

6. D. Gni'dium. *Flax-leaved Daphne*. "Panicles terminating; leaves linear, lanceolate, acuminate;" stem branched, about two feet high; flowers surrounded with leaves, sweet-scented, red above; leaves smooth, deciduous. June to August. Spain. 1597. S.

7. D. Cneo'rum. *Trailing Daphne*. "Flowers in bunches, sessile; leaves naked, lanceolate, pointed;" stem about a foot high, branched; leaves scattered; branches terminated by small clusters of pur-



ple flowers, sometimes white, of a pleasant scent. April to September. Switzerland. 1752. S.

B. D. Collina. *Neapolitan Mezereon*. "Flowers in bunches, terminal; leaves obovate, smooth above, woolly beneath;" stems about three feet high; branches often forked; leaves evergreen, alternate; calyx red, downy; flowers rose-coloured. January to April. Italy. 1752. E. S.

These are an elegant and beautiful assemblage of shrubs, for the most part of a pleasant odour; several of them are somewhat difficult to preserve in gardens; although they will thrive very well when raised from seed, they invariably die when transplanted.

XIV. STELLERA, from G. A. Steller, a Russian botanist, 1746. Nat. ord. *Linn.* *Vepriculæ.* *Juss.* *Thymelææ.* 2 Species.

1. S. Passerina. *Flax-leaved Stellera*. "Leaves linear; flowers axillary, sessile, with a four cleft calyx;" stem upright, branched; leaves alternate, sessile, smooth, shaped like a sparrow's tongue, whence its specific name; flowers small, greenish with yellow tips, in loose spikes. July, August. South of Europe. 1759. S.

*Order Digynia.*

XV. MÆHRINGIA, in honour of Paul Mæhring, a Physician and Botanist of Oldenburg, died 1782. Nat. ord. *Linn.* and *Juss.* *Caryophyllel.* 1 Species.



1. *M. Musco'sa*. *Mossy Mæringia*. Stems annual, herbaceous, thread-shaped, round, smooth, branched; leaves opposite, linear, narrow, dilated at the base; flowers solitary, on long slender stalks; petals narrow, milk white. June, July. South of Europe. 1775. P.

*Order Trigynia.*

XVI. POLY'GONUM, from πολυ, many, and γονυ, the knee, on account of the many knots on the stalks. Nat. ord. Linn. Holoraceæ. Juss. Polygonæ. 43 Species.

1. *P. Frutescens*. *Shrubby Polygonum*. "Stem shrubby, two outmost segments of the calyx smallest, reflexed;" calyx five leaved, white or reddish, with a broad green keel to the two outmost segments; flowers numerous, in terminal clusters, with sheathing membranous floral leaves. August, Siberia. 1770. S.

2. *P. Bistorta*. *Great Bistort or Snake Weed*. "Stem quite simple; spike solitary; leaves ovate, waved, running down into the foot-stalks;" stem about a foot and a half high; spike dense, rose-coloured, scentless; radical leaves very numerous. May to September. Britain. P.

3. *P. Virginianum*. *Virginian Polygonum*. "Stamens five; styles two; calyx four cleft, unequal; leaves ovate;" stems hard, with great knobs or joints; leaves large, broad, often spotted; spikes termina



and axillary; flowers white. August. North America. 1640. P.

4. *P. Amphibium. Amphibious Persicaria.* "Stamens five; styles two; spike ovate;" leaves oblong, lanceolate, stalked, smooth, shining, floating on the water; spike upright, crimson, handsome. June to August. Britain. P.

5. *P. Orientale. Oriental or Great Garden Persicaria.* "Stamens seven; styles two; leaves ovate, dependent; stipules hairy, salver-shaped; stem erect, panicled; spikes pendulous;" stem six feet high; leaves large, downy, flaccid; spikes of crimson flowers, sometimes white, inodorous. July to October. East Indies. 1707. A.

6. *P. Divaricatum. Spreading White Polygonum.* "Stem much branched, smooth, spreading, clusters lax; leaves lanceolate, smooth;" stems three or four feet high, round, reedy, leafy, branching; leaves clustered, on stalks of various lengths; flowers in copious clusters, large, white. July, August. Siberia. 1759. P.

7. *P. Fagopyrum. Cultivated Buck Wheat, Brank.* "Leaves heart arrow-shaped; stem nearly upright, without prickles; angles of the seeds even;" root fibrous; herb rather succulent; stem zigzag, leafy, smooth except a downy line along one side; leaves entire, acute, smooth; flowers handsome, numerous, red and white, in panicled clusters; native of



the East, but long since naturalized in England. April to October. A.

8. *P. Chinen'se*. *Chinese Buck Wheat*. "Flower-stalks rugged; leaves ovate, stalked; floral leaves heart-shaped, sessile;" stem quadrangular, decumbent; branches very much spreading; flowers terminal, paniced, somewhat three-forked, whitish, five parted. August. China. 1795. A.

9. *P. Sagitta'tum*. *Prickly Arrow-leaved Buck Wheat*. "Leaves arrow-shaped; stem prickly;" stem very short; leaves entire, smooth; leaf-stalks prickly, spreading; flowers terminating, collected into a spherical head; stems sometimes climbing. August. North America. 1759. A.

10. *P. Tarta'ricum*. *Tartarian Buck Wheat*. "Leaves heart arrow-shaped; stem unarmed, erect; seeds somewhat toothed;" stem herbaceous, about two feet high; leaves entire, on long stalks; flowers white; peduncles axillary and terminating, many flowered, with oblong involucre. July, August. Siberia. 1759. A.

11. *P. Scan'dens*. *American Climbing Buck Wheat*. "Leaves heart-shaped; clusters simple, axillary; stem erect, smooth, climbing," red, succulent, seven or eight feet high; leaves stalked, alternate; flowers numerous, in spikes. August, September. North America. 1749. P.

This genus is remarkable for the variety of the number of stamens in the different species, some having five, others



six, seven, or eight: the styles vary also from two to three. The Garden Persicaria is a hardy and frequent plant in most gardens: our English species are in number ten, most of them rejected as weeds. Buck Wheat has been long cultivated for its seed, as food for pheasants, poultry, and cattle. The fresh plant has the singular property of intoxicating swine.

*Order Tetragynia.*

XVII. ADOX'A, from *a*, privative, and *δοξα*, glory, it being a plant of no show. Nat. ord. *Linn Succulentæ. Juss. Saxifragæ.* 1 Species.

1. A. Moschatelli'na. *Tuberous Moschatel, Bulbous Fumitory.* Root-leaves three or four, thrice ternate, deeply cut, smooth, shining; stalk somewhat taller than the leaves, simple, nearly square; head cubicle, consisting of four lateral flowers terminated by a fifth; in the former ten stamens and five styles, in the latter eight stamens and four styles; flowers yellowish green, smelling like musk. April, May. Britain. P.

XVIII. PA'RIS, said to be of uncertain derivation; but surely the Trojan Prince may serve as an etymology, as well as the youths Adonis, Hyacinthus, &c, Nat. ord. *Linn. Sarmentaceæ. Juss. Asparagi.* 1 Species.

1. P. Quadrifo'lia. *Herb Paris, True Love, One Berry.* Leaves ovate, four; stem solitary, a foot



high, simple, naked, except at the summit, where it bears four spreading leaves, equal, veiny, acute, entire, of a dull green; flower solitary, terminal, on an upright angular stalk; petals green; berry purple: after ripening, the whole herb soon turns pale yellow and withers. This singular plant, from the peculiarity of its habit, has always attracted the notice of botanists. May, June. Britain. P.



## CLASS IX.

## ENNEANDRIA.

*Order Monogynia.*

I. LAURUS. Calyx none; corolla calyx-like, in six deep segments; nectary of three glands, bearing two bristles, and surrounding the germ; innermost filaments bearing glands; drupe one seeded.

*Order Trigynia.*

II. RHEUM. Calyx six cleft, permanent; seed one, triangular.

*Order Hexagynia.*

III. BUTOMUS. Calyx none; petals of the corolla six; capsules six, many seeded.



## CLASS IX.

## ENNEANDRIA.

*Order Monogynia.*

1. LAURUS, from *laus*, praise, the first species being emblematic of renown and victory. Nat. ord. Linn. Holoraceæ. Juss. Lauri. 34 Species.

1. L. Nobilis. Common Sweet Bay. "Leaves lanceolate, veiny, evergreen; flowers four-cleft, ~~dim.~~



cious, in short axillary clusters;" leaves pleasantly aromatic; flowers borne by old trees only, pale yellow; fruit black, the size of an olive. This with us is rather a shrub than a tree, and putting forth numerous suckers, it varies with leaves broader or narrower. April, May. Italy. 1548. E. S.

2. *L. Camphora. Camphor Tree.* "Leaves lanceolate, ovate, triply nerved;" clusters axillary, somewhat compound, shorter than the leaves, which are pale yellow above, glaucous green below, stalked; flowers small, white. This tree grows to a great size in Japan, every part of it abounds with Camphor, which is obtained by distillation. April to June. Japan. 1727. E. S. Gr. Ho.

3. *L. Benzo'in. Common Benjamin Tree.* "Leaves without nerves, ovate, sharp at both ends, entire, annual;" stem from ten to twelve feet high, much branched; leaves about three inches long; flowers of a white herbaceous colour, with from six to nine stamens; involucre four-leaved. The Gum Benjamin or Benzoic acid which is used in medicine, is not obtained from this tree, but from the *Styrax Benzoin*, growing in the Isle of Sumatra. April, May. Virginia. 1683. T.

4. *L. Sas'safras. Sassafras Tree.* "Leaves entire and three-lobed:" a tree rising from twenty to thirty feet in its native soil, but here scarcely exceeding ten; leaves alternate, stalked, of a lucid green, early deciduous; flowers in slender clusters, greenish white,



sometimes perfect, and sometimes only male. June. North America. 1633. T.

This fine genus of chiefly aromatic trees contains the Cinnamon and Cassia Bark Tree, now not uncommon in the English stoves, and which latter is the Cassia of the Scriptures. The Bay was formerly called in England, Laurel, which has caused many mistakes; it is, without doubt, the *Laurus* of the Romans, and the *Daphne* of the Greeks: but the shrub, which now commonly bears the name of Laurel, is the *Prunus Lauro-cerasus* of the class *Icosandria*, a plant of later introduction.

#### *Order Trigynia.*

II. RHEUM, from  $\rho\eta\omega$ , to flow, on account of its cathartic qualities. Nat. ord. *Linn.* *Holoraceæ.* *Juss.* *Polygoneæ.* 8 Species.

1. *R. Rhapon'ticum.* *Rhapontic Rhubarb.* "Leaves obtuse, smooth; veins somewhat hairy beneath, the sinus dilated at the base; stalks furrowed on the upper side, rounded at the edge;" root large, thick, much divided, reddish brown without, yellow within; stems from two to three feet high, jointed, purple; flowers white, forming a thick cluster, which becomes a panicle of large triangular brown seeds. May, June. Asia. 1573. P.

2. *R. Undula'tum.* *Wave-leaved Rhubarb.* "Leaves rather hairy, waved, the sinus dilated at the base; stalks flat above, sharp at the edges;" root of many thick fibres, deep yellow; stem upright, three or four feet in height, of a pale brown; leaves strongly veined



beneath; flowers white, in loose panicles; seeds rusty brown. May, June. China and Siberia. 1734. P.

3. R. Palma'tum. *Officinal Rhubarb*. "Leaves palmate, pointed, roughish, the sinus dilated at the base; stalks slightly furrowed above, rounded at the edge; root thick, oval, sending forth numerous taper branches, brown without, yellow within;" stem erect, six or eight feet high, round, hollow, jointed, sheathed, slightly furrowed, branched towards the top; radical leaves numerous, large, rough, roundish, deeply lobed; stem-leaves one at each joint; flowers greenish white, in numerous clusters, forming a spike. May. Bucharia. 1763. P.

4. R. Compac'tum. *Thick-leaved Rhubarb*. "Leaves somewhat lobed, very obtuse, lucid, sharply toothed, quite smooth;" root large, much divided; stems five or six feet high, green, branched at the upper part; leaves long, broad at the base, leathery, compact, rather waved, of a sharp acid flavour; flowers white, forming an erect panicle or spike. May, June. Tartarv. 1758. P.

5. R. Ri'bes. *Warted-leaved Rhubarb*. "Leaves very obtuse, studded with warts, and having spinous veins beneath; stalks flat above, rounded at the margin;" root thick and fleshy; stems two feet high, hairy, green, tinged with purple towards the bottom; leaves large, curled at the edge, veined, purplish green, paler beneath: it has not flowered in England. The Levant. 1724. P.



sometimes perfect, and sometimes only male. June. North America. 1633. T.

This fine genus of chiefly aromatic trees contains the Cinnamon and Cassia Bark Tree, now not uncommon in the English stoves, and which latter is the Cassia of the Scriptures. The Bay was formerly called in England, Laurel, which has caused many mistakes; it is, without doubt, the *Laurus* of the Romans, and the *Daphne* of the Greeks: but the shrub, which now commonly bears the name of Laurel, is the *Prunus Lauro-cerasus* of the class *Icosandria*, a plant of later introduction.

#### *Order Trigynia.*

II. *RHEUM*, from *ρῆω*, to flow, on account of its cathartic qualities. Nat. ord. *Linn.* *Holoraceæ.* *Juss.* *Polygoneæ.* 8 Species.

1. *R. Rhaponticum.* *Rhapontic Rhubarb.* "Leaves obtuse, smooth; veins somewhat hairy beneath, the sinus dilated at the base; stalks furrowed on the upper side, rounded at the edge;" root large, thick, much divided, reddish brown without, yellow within; stems from two to three feet high, jointed, purple; flowers white, forming a thick cluster, which becomes a panicle of large triangular brown seeds. May, June. Asia. 1573. P.

2. *R. Undulatum.* *Wave-leaved Rhubarb.* "Leaves rather hairy, waved, the sinus dilated at the base; stalks flat above, sharp at the edges;" root of many thick fibres, deep yellow; stem upright, three or four feet in height, of a pale brown; leaves strongly veined



beneath; flowers white, in loose panicles; seeds rusty brown. May, June. China and Siberia. 1734. P.

3. R. Palma'tum. *Officinal Rhubarb*. "Leaves palmate, pointed, roughish, the sinus dilated at the base; stalks slightly furrowed above, rounded at the edge; root thick, oval, sending forth numerous taper branches, brown without, yellow within;" stem erect, six or eight feet high, round, hollow, jointed, sheathed, slightly furrowed, branched towards the top; radical leaves numerous, large, rough, roundish, deeply lobed; stem-leaves one at each joint; flowers greenish white, in numerous clusters, forming a spike. May. Bucharia. 1763. P.

4. R. Compac'tum. *Thick-leaved Rhubarb*. "Leaves somewhat lobed, very obtuse, lucid, sharply toothed, quite smooth;" root large, much divided; stems five or six feet high, green, branched at the upper part; leaves long, broad at the base, leathery, compact, rather waved, of a sharp acid flavour; flowers white, forming an erect panicle or spike. May, June. Tartarv. 1758. P.

5. R. Ri'bes. *Warted-leaved Rhubarb*. "Leaves very obtuse, studded with warts, and having spinous veins beneath; stalks flat above, rounded at the margin;" root thick and fleshy; stems two feet high, hairy, green, tinged with purple towards the bottom; leaves large, curled at the edge, veined, purplish green, paler beneath: it has not flowered in England. The Levant. 1724. P.



The leaf-stalks of the first species, *R. Rhaponticum*, are in culinary use for tarts. The root was long supposed to be the Turkey Rhubarb, but failing in perfection, from the incongeniality of our climate: some Rhubarb seeds, however, being sent by a Tartarian merchant to Boerhaave at Leyden, put an end to its pretensions, for they produced two different species, the *R. Palmatum* and *R. Undulatum*, both of which were admitted to be the genuine drug, little if at all inferior to that imported. It has since been grown in Britain with equal success. *R. Palmatum* is considered as somewhat the superior; but it has been remarked, that if these two latter species are planted together, they will produce a hybrid plant of better quality than either. All the species of *Rheum* possess a considerable degree of cathartic virtue.

#### *Order Hexagynia.*

III. BU'TOMUS, from βους, an ox, and τέμνω, to cut; because its sharp leaves wound the tongues of cattle. Nat. ord. *Linn.* Tripetaloideæ. *Juss.* Junci. 1 Species.

1. *B. Umbellatus.* *Flowering Rush, or Water Gladiole.* Leaves all radical, linear, triangular; about three feet long, erect; stalk solitary, round, simple; umbel terminal, many flowered; involucre of three membranous leaflets; flowers variously shaded with rose colour, purple, and white; growing in water. July. Britain. P.



## CLASS X.

## DECANDRIA.

*Order Monogynia.*1. *Flowers many petaled, irregular.*

I. SOPHORA. Calyx bell-shaped, oblique, five-toothed, top shaped at the base; corolla papilionaceous; wings as long as the standard; legume beaded; seeds many.

II. PODALYRIA. Calyx somewhat two lipped, five cleft; corolla papilionaceous; wings as long as the standard; legume inflated; seeds many.

III. ANAGYRIS. Calyx five toothed, two lipped; corolla papilionaceous; standard and wings shorter than the keel; legume compressed, many seeded.

IV. CERCIS. Calyx five toothed, gibbous below; corolla papilionaceous; standard short, placed beneath the wings; legume compressed; seeds connected to the upper suture.

V. HYMENÆA. Calyx five cleft; petals of the corolla five, nearly equal; style twisted inwards; legume filled with a mealy pulp.

VI. CASSIA. Calyx five-leaved; petals of the corolla five; three upper anthers barren, three lower ones beaked; legume oblong, with transverse partitions.



VII. **DICTAMNUS.** Calyx five-leaved; petals of the corolla five, unequal, spreading; filaments besprinkled with resinous glands; anthers terminal, simple; capsules five, conjoined.

VIII. **RHODORA.** Calyx five-toothed; corolla of three petals, unequal; stamens declining; capsule superior, of five cells.

2. *Flowers many petaled, equal.*

IX. **MELIA.** Calyx five-toothed; petals of the corolla five; nectary cylindrical, toothed at its mouth, bearing the anthers; drupe a nut of five cells.

X. **GUAIACUM.** Calyx of five unequal leaves; petals of the corolla five; stamen simple, stigma acute; capsule stalked, of five cells and five valves; seeds solitary, pendulous.

XI. **RUTA.** Calyx in five deep segments; petals of the corolla concave; receptacle surrounded with ten honey-bearing pores; capsule lobed; anthers simple.

XII. **TRIBULUS.** Calyx in five deep segments; petals of the corolla five, spreading; style conical; capsules five or ten, gibbous, spinous, with several seeds.

XIII. **ZYGOPHYLLUM.** Calyx of five leaves; petals of the corolla five; nectary of ten scales, embracing the germ, and bearing the stamens; capsule of five cells, superior.

XIV. **CLETHRA.** Calyx five cleft; petals of the



corolla five; stigma three cleft; capsule three celled, three valved.

XV. PYROLA. Calyx in five deep segments; petals of the corolla five; capsule superior, with five cells bursting at the angles, many seeded; anthers with two pores.

XVI. LEDUM. Calyx five cleft; corolla flat, in five deep regular segments; capsule of five cells, gaping from the base.

XVII. DIONÆA. Calyx of five leaves; petals of the corolla five, equal; capsule superior, furrowed, of one cell; seeds numerous; stigma fringed.

3. *Flowers with a monopetalous equal corolla.*

XVIII. ANDROMEDA. Calyx five parted; corolla ovate or bell-shaped, five cleft; capsule superior, five celled; partitions from the middle of the valves.

XIX. RHODODENDRON. Calyx inferior, in five divisions; corolla somewhat funnel-shaped, irregular; stamens declining; capsule of five or ten cells, partitions from the margin of the valves.

XX. KALMIA. Calyx in five deep segments; corolla cup-shaped, with ten prominencies; anthers with two pores; capsule with five cells.

XXI. EPIGÆA. Outer calyx of three leaves, inner calyx in five deep segments; corolla salver-shaped; capsule of five cells, with a central five-parted receptacle, bearing the seeds.

XXII. GAULTHERIA. Calyx inferior, five cleft,



permanent; corolla ovate; nectary of ten awl-shaped points; capsule of five cells, clothed with the pulpy calyx.

XXIII. ARBUTUS. Calyx five-parted; corolla ovate, five cleft, pellucid at the base; capsule five celled.

XXIV. STYRAX. Calyx of one leaf, inferior; corolla funnel-shaped, in five equal segments; stamens in a simple row; anthers simple; drupe with one or two seeds.

VIII. *Vaccinium myrtillus and uliginosum.*

*Order Digynia.*

XXV. CHRYSOSPLENIUM. Calyx four or five leaved, coloured; corolla none; capsule two beaked, one celled, half inferior, half bivalved, many seeded.

XXVI. HYDRANGEA. Calyx superior, five-toothed; corolla of five petals; capsule of two cells and two beaks, containing many seeds.

XXVII. SAXIFRAGA. Calyx five cleft, permanent; petals of the corolla five; capsule with two beaks, of one cell, bursting between the beaks; seeds numerous.

XXVIII. TIARELLA. Calyx in five deep segments; petals of the corolla five, undivided, inserted into the calyx; capsule of one cell, with two unequal valves.

XXIX. MITELLA. Calyx five cleft, inferior; pe-



tals of the corolla five, wing-cleft, inserted into the calyx; capsule of one cell, with two equal valves.

XXX. GYPSOPHILA. Calyx of one leaf, bell-shaped, angular; petals of the corolla five, obovate, nearly entire; capsule superior, roundish, of one cell.

XXXI. SAPONARIA. Calyx of one leaf, ovate, cylindrical, without angles, naked; petals of the corolla five, with long claws; capsule superior, oblong, of one cell.

XXXII. DIANTHUS. Calyx cylindrical, of one leaf, with scales at the base; petals of the corolla five, with long claws; capsule superior, cylindrical, of one cell.

*Order Trigynia.*

XXXIII. ARENARIA. Calyx five leaved, spreading; petals of the corolla five, entire; capsule superior, one celled, many seeded.

XXXIV. STELLARIA. Calyx of five leaves, spreading; petals of the corolla five, deeply cloven; capsule superior, of one cell, with six teeth at the orifice; seeds numerous.

XXXV. CUCUBALUS. Calyx of one leaf inflated; petals of the corolla five, furnished with claws; berry superior, finally one celled; seeds numerous.

XXXVI. SILENE. Calyx of one leaf, swelling; petals of the corolla five, with erect claws; capsule superior; imperfectly three celled, bursting at the top; seeds numerous.



**XXXVII. GARIDELLA.** Calyx of five petal-like leaves; corolla none; nectaries five, two lipped, cloven; capsules three, connected; seeds numerous.

v. *Tamarix germanica.*

*Order Tetragynia.*

*Lychnis alpina and quadridentata.*

*Order Pentagynia.*

**XXXVIII. COTYLEDON.** Calyx five cleft; corolla of one petal, with five nectareous scales at the base of the germ; capsules five.

**XXXIX. SEDUM.** Calyx five cleft; petals of the corolla five, with five nectareous scales at the base of the germ; capsules five, superior.

**XL. PENTHORUM.** Calyx in five or ten segments; petals of the corolla five, minute; capsule of five cells, with five points; seeds numerous.

**XLI. SPERGULA.** Calyx of five leaves; petals of the corolla five, undivided; capsule superior, ovate, of one cell, with five valves.

**XLII. CERASTIUM.** Calyx five-leaved; petals of the corolla five cleft: capsule one celled, opening at the top, orifice toothed.

**XLIII. AGROSTEMMA.** Calyx of one leaf, leathery; petals of the corolla five, clawed; border obtuse, undivided; capsule one celled.

**XLIV. LYCHNIS.** Calyx of one leaf, oblong; pe-



tals of the corolla five, with claws; the border usually divided; capsule superior, with five teeth at its orifice, from one to four celled.

XLV. OXALIS. Calyx five-leaved; petals of the corolla five, connected by their claws; stamens unequal, partially combined at their base; capsule superior, of five cells, bursting at the five angles; seeds arilled.

VIII. *Adoxa*. XXII. *Coriaria*. XVI. *Some Geraniums*.

#### *Order Decagynia.*

XLVI. PHYTOLACCA. Calyx of five coloured leaves; corolla none; berry superior, of five or ten cells, and as many seeds.



### CLASS X.

#### DECANDRIA.

##### *Order Monogynia.*

1. SO'PHORA. *Sophora* is the Egyptian name of a species of Cassia, to which this genus bears a near relation. Nat. ord. Linn. Papilionaceæ. Juss. Leguminosæ. 9 Species.

1. S. Tetrap'tera. *Four-winged Sophora*. "Leaves pinnate; leaflets elliptic, oblong, from thirteen to nineteen, silky on both sides; clusters lateral; legume slightly hairy, with four membranous wings;" flowers



SECRET  
NO FOREIGN DISSEM  
NO UNCLASSIFIED DISSEM  
NO UNCLASSIFIED DISSEM  
NO UNCLASSIFIED DISSEM

**25. Hesperia. Blackland Spiders. - Large**  
**spiders. color. numerous. twenty-five to fifty on**  
**walls. brown. occasionally. - common later;**  
**spider web not numerous. - Brown about**  
**not so many as common. Jan. New Zealand.**  
**178. 3**

[illegible]

1. The following are the names of the persons who have been appointed to the various positions in the Department of the Interior, and the date of their appointment:

1. Species in the Family in the Order of Nature in France in June 1861 and the Species in France in June 1861.

2. Impressions upon the Fingers - Leaves  
smooth, slender, entire, slightly revolute above,  
pubescent, slightly mucronate, longer than the foot.



stalk;" flowers in whorls, about three in each, yellow; stem spreading, branched, leafy. July. Siberia. 1776. P.

2. *P. Australis*. *Blue-flowered Podalyria*. "Leaves ternate, stalked; leaflets obovate, lanceolate, obtuse; stipules lanceolate, acute, as long again as the leaf-stalk;" stem about two feet high, smooth in every part, glaucous, green; clusters erect, of large handsome blue flowers; standard and wings with darker stripes; keel white. July. Carolina. 1758. P.

3. *P. Tinctoria*. *Dyers' Podalyria, or Wild Indigo*. "Leaves ternate, stalked: leaflets roundish, ovate, obtuse, dagger-pointed; stipules obsolete, oblong, acute, much shorter than the leaf-stalk;" a low procumbent plant, smooth; branches numerous, each terminated by a simple cluster of yellow flowers. August. North America. 1759. P.

4. *P. Alba*. *White-flowered Podalyria*. "Leaves ternate, stalked, smooth; leaves elliptic, oblong; stipules awl-shaped, shorter than the leaf-stalk, deciduous; germ smooth;" flowers white, sometimes spotted with brown, in clusters; sometimes a little whorled. July. North America. 1724. P.

These plants, by later botanists, have been removed from this genus, and have been erected into two new genera, without any very evident necessity; indeed, *Podalyria* itself stood at first as a section in the genus *Sophora*. What is chiefly to be remarked in all these genera, as well



as the four following, is the entire separation of the stamens; otherwise, from the form of the corolla, they would naturally be sought for under the class Diadelphia.

III. ANAGY'RIS, from the name of a town in Attica. Nat. ord. *Linn.* Papilionaceæ. *Juss.* Leguminosæ. 1 Species.

1. A. Fœ'tida. *Stinking Bean Trefoil*. "Leaves ovate; flowers axillary:" a shrub rising to the height of eight or ten feet; flowers of a bright yellow, growing in spikes, like the Laburnum, but its seeds are never perfected in England, which accounts for its being very scarce. May. Italy. 1570. S.

IV. CER'CIS, the κερκίς of Theophrastus, from κερκος, a tail. Nat. ord. *Linn.* Lomentaceæ. *Juss.* Leguminosæ. 2 Species.

1. C. Siliquas'trum. *Common Judas Tree*. "Leaves heart-shaped, roundish, smooth:" a tree about twenty feet high; branches irregular, spreading; leaves alternate, stalked, deciduous; flowers in large clusters, on short stalks, of a bright crimson or purple, very beautiful, sometimes flesh-coloured or white, appearing rather before the leaves. May, June. The Levant. 1596. T.

2. C. Canaden'sis. *Canadian Judas Tree*. "Leaves acuminate, heart-shaped, pubescent:" the red bud tree of the Americans; smaller and less beautiful than the last. May, June. North America. 1730. T.



The first species is remarkably ornamental. Why tradition has fixed upon it as the tree which afforded to the traitor Judas the means of finishing his life and his remorse, does not satisfactorily appear.

V. HYMENÆA, from *Hymen*, the god of marriage, its younger leaves cohering in pairs through the night. Nat. ord. *Linn.* Lomentaceæ. *Juss.* Leguminosæ. 3 Species.

1. H. Cour'baril. *Locust Tree*. "Leaves in pairs, pointed; flowers in loose panicles:" a large spreading tree; flowers yellow striped with purple; pods fleshy, brown; seeds inclosed in a whitish substance, as sweet as honey; from the roots of the tree exudes a transparent resin, red or yellowish, the *Gum Anime* of the shops, the finest varnish known. West Indies. 1688. T. Hot Ho.

VI. CAS'SIA, supposed to be from an Hebrew origin. Nat. ord. *Linn.* Lomentaceæ. *Juss.* Leguminosæ. 59 Species.

1. C. Marilan'dica. *Maryland Cassia*. "Leaves pinnate; leaflets in eight pairs, ovate, oblong, equal, a gland at the base of each leaf-stalk;" stems several, three or four feet high, herbaceous, cylindrical; leaves alternate; flowers bright yellow, in short axillary bunches; legumes a little curved. August to October. North America. 1723. P.

2. C. Fis'tula. *Purging Cassia*. "Leaves pinnate; leaflets in five pairs, egg-shaped, pointed,



smooth ; leaf-stalks without glands :'' a tree forty or fifty feet high ; flowers large, veined, in axillary bunches ; pods from one to two feet long, divided into partitions, each containing a seed lodged in a sweetish black pulp. July. East Indies. 1751. T. Hot Ho.

3. *C. Sen'na. Egyptian Cassia, or Common Senna.* "Leaves pinnate ; leaflets in five pairs, lanceolate, equal, a gland at the base of each leaf-stalk ;" stems two or three feet high, somewhat woody ; branches slender ; leaves alternate, of a lively green ; flowers pale yellow, in terminal bunches, on long stalks ; legumes ovate, kidney-shaped. July, August. Egypt and Barbary. 1640. A. Hot Ho.

These plants must not be confounded with the *Laurus Cassia*, or Bastard Cinnamon, the bark of which was, as a spice or perfume, so much in favour with the ancients. *C. Fistula* is now much cultivated in the West Indies for the sake of its pulp, which is a mild and pleasant laxative, but is not thought to be of equal quality with that produced in the East Indies ; this substance was known in medicine about the time of Avicenna, the Arabian Physician, under the name of *Cassia Solutiva*, in distinction from *Cassia Aromatica*, the spice above referred to. *C. Senna* seems first to have been introduced into practice about the same period. This plant is not so frequent in the English collections as several other species.

VII. *Dictam'nus*, from *τίκτω*, to bring forth. Nat. ord. *Linn.* Multisiliquæ. *Juss.* Rutaceæ. 1 Species.



1. D. Al'bus. *Fraxinella*. Leaves pinnate, somewhat like those of the Ash, whence its common name; stems from one to two feet high, leafy in their middle part, terminated by a panicle of rose-coloured flowers, sometimes white: its specific name alludes to the whiteness of the root; whole plant smelling like lemon-peel. May to July. Germany. 1596. P.

VIII. RHO'DORA, from *ρόδον*, a rose, the colour of the flowers. Nat. ord. *Linn.* Bicornes. *Juss.* Rhododendra. 1 Species.

1. R. Canaden'sis. *Canadian Rose Blossom*. Stem bushy, erect, two or three feet high, with round smooth branches; leaves deciduous, elliptic, entire, appearing after the flowers; flowers in solitary umbels, rose-coloured, with violet anthers, scentless. April, May. North America. 1767. S.

IX. ME'LIA, from its resemblance to the Ash, the *μελία* of the Greeks. Nat. ord. *Linn.* Trihilatæ. *Juss.* Meliæ. 4 Species.

1. M. Azedara'ch. *Common Bead Tree, or Pride of China*. "Leaves twice pinnate; leaflets smooth, about five," ovate, notched, pointed: a large sized tree; flowers lateral, in long loose panicles, white streaked with pink; drupe oblong, the size of a Cherry, pale yellow; the pulp poisonous; the nuts having a perforation through the centre, are threaded



or beads to assist the devotion of the Catholics. June, to August. Syria. 1656. T. Gr. Ho.

X. GUA' IACUM, a barbarous name, derived from the Mexican appellation of the plant. Nat. ord. *Linn.* Gruinales. *Juss.* Rutaceæ. 3 Species.

1. G. Officina'le. *Common Guaiacum, or Lignum Vitæ.* "Leaves pinnate; leaflets two pairs, elliptic, obtuse:" a tree about thirty feet high; branches numerous; leaves opposite; flowers pale blue, on simple axillary clustered stalks; wood hard and dark, sometimes called Brazil wood, decoctions of this and of the bark were formerly much used in medicine, as the gum is at present. This latter substance is obtained by wounding the bark, when it copiously exudes. July to September. West Indies. 1691. T. Hot Ho.

XI. RU' TA, from *ρρω*, to preserve, it being reputed a great preserver of health. Nat. ord. *Linn.* Mulsiliquæ. *Juss.* Rutaceæ. 7 Species.

1. R. Grave'olens. *Common Rue.* "Leaves repeatedly compound; leaflets oblong, the terminal one obovate; petals of the corolla entire;" stem bushy; leaves alternate, of a blueish glaucous hue; flowers in terminal panicles, of a dull yellow; the terminal flowers only having ten stamens, the rest are octandrous; leaves more or less round or oblong. June to September. South of Europe. 1562. E. S.



2. R. Monta'na. *Mountain Rue*. "Leaves repeatedly compound; leaflets all linear; branches of the panicle in bunches; petals entire:" of more humble growth than the former; radical leaves crowded into a dense tuft; flowers dull yellow. August. South of Europe. 1596. E. P.

Rue is one of the oldest inhabitants of our gardens, and has caused many fanciful allusions in our ancient writers; every part of the plant, when rubbed, has a peculiar acrid pungent smell, and its leaves, if much handled, will excoriate the skin: it is supposed useful to prevent infection. Its internal use is at present confined to the diseases of children. The stamens are remarkable for their progressive approach to the stigma, over which they in turn explode their farina and retire.

XII. TRI'BULUS, from τρεῖς, three, and βολη, a cast or blow, from the likeness of the fruit to the warlike instrument, the caltrops. Nat. ord. *Linn.* Gruinales. *Juss.* Rutaceæ. 4 Species.

1. T. Terrestris. *Small Caltrops*. "Leaves pinnate; leaflets six pair; nearly equal, rather hairy; capsule with four awl-shaped thorns; style deciduous;" flowers yellow, on simple axillary stalks; stems slender, spreading. In the South of Europe this plant is troublesome to cattle by its sharp thorns wounding their feet. July. South of Europe. 1596. A.

XIII. ZYGOPHYLLUM, from ζυγος, a yoke, and φυλλον, a leaf, each pair of leaflets in most of the



species being, as it were, yoked together. Nat. ord. *Linn.* Grinales. *Juss.* Rutaceæ. 14 Species.

1. *Z. Faba'go.* *Common Bean Caper.* "Leaves conjugate, stalked; leaflets obovate; calyx smooth; petals entire; stem herbaceous;" leaflets with a principal rib and two smaller ones; stipules between the leaf-stalks in pairs, membranous, ovate; flowers yellow, on simple upright stalks; capsule oblong; seeds numerous. It may be remarked that it is the leaves and not the fruit which resemble those of the garden Bean. July to September. Syria. 1596. P.

XIV. *CLE'THRA*, from κλειω, to close or shut up. Nat. ord. *Linn.* Bicornes. *Juss.* Ericæ. 4 Species.

1. *C. Alnifo'lia.* *Alder-leaved Clethra.* "Shrubby; leaves obovate, lanceolate, serrate, smooth; racemes simple, in form of spikes;" stems about ten feet high; branches diffuse; leaves alternate, stalked; flowers white, numerous; floral leaves linear, deciduous; leaves varying from smooth to woolly beneath. August to October. North America. 1731. S.

2. *C. Panicula'ta.* *Panicled Clethra.* "Shrubby; leaves lanceolate, naked on both sides; flowers panicled;" panicle narrow, lengthened; peduncles pubescent, white; flowers white. August to October. North America. 1770. S.

XV. *PY'ROLA*, diminutive of *Pyrus*, its leaves re-



sembling those of the Pear-tree. Nat. ord. *Linn.*  
*Bicornes.* *Juss. Ericæ.* 6 Species.

1. *P. Rotundifo'lia.* *Round-leaved Winter Green.*  
"Stamens ascending, style twice their length, re-  
curved; cluster many flowered; calyx as long as the  
stamens;" stems short, simple, leafy; leaves four or  
five, stalked, roundish; flower-stalk terminal, slightly  
twisted, bearing from four to ten white, large, hand-  
some flowers. July. Britain. P. E.

2. *P. Unifo'ra.* *Single-flowered Winter Green.*  
"Stalk bearing a solitary flower; stigma with five  
rays;" leaves obovate, serrate, veined; flowers nod-  
ding, large, fragrant, white or slightly reddish. July.  
Britain. P. E.

3. *P. Mi'nor.* *Less Winter Green.* "Stamens and  
pistil straight; flowers in racemes, dispersed;" stalk  
straight, not twisted; leaves elliptic; flowers nu-  
merous, small, drooping, white with a pink tinge;  
style very short; stigmas large: a smaller plant than  
the first species. July. Britain. P. E.

4. *P. Secun'da.* *Serrated Winter Green.* "Cluster  
of flowers drooping all one way;" leaves ovate,  
acute, serrate; style straight; stigma dilated, five  
lobed; stems long and trailing; leaves scattered,  
sometimes crowded; cluster of many crowded greenish  
white flowers. July. Britain. P. E.

5. *P. Umbella'ta.* *Umbelled Winter Green.* "Leaves  
obovate, serrate; flowers somewhat umbellate; stigma



nearly sessile; stamens smooth;" stem woody, somewhat branched; leaves crowded in something like whorls, stalked; flowers cream-coloured, crimson at the base; stamens short, red. June. North America. 1752. P. E.

6. *P. Macula'ta.* *Spotted or Holly-leaved Winter Green.* "Stalks two or three flowered; leaves egg lance-shaped, with tooth-like serratures; stigma nearly sessile; stamens woolly; flowers white. June, July. North America. 1759. P. E.

These plants are both curious and beautiful, but are all very difficult to cultivate in gardens, as, growing on cold hills, and in a mossy moorish earth, they seldom continue long when moved to a richer soil and warmer situation.

XVI. *LEDUM*, from *læd'ndo*, injuring, on account of its noisome odour. Nat. ord. *Linn.* *Bicornes.* *Juss.* *Rhododendra.* 3 Species.

1. *L. Palus'tre.* *Marsh Ledum.* "Leaves linear, revolute, woolly beneath;" stem shrubby, erect, much branched; leaves numerous, scattered, stalked; flowers numerous, in dense, simple, terminal corymbs, white, pretty: plant, when bruised, has an oppressive scent. There is a dwarf variety. April, May. North of Europe. 1762. E. S.

2. *L. Latifo'lium.* *Labrador Tea, or Broad-leaved Ledum.* "Leaves elliptic, revolute, woolly beneath; stamens commonly five;" leaves much broader than in the former, with a dense rusty wool on the under



side; flowers much the same, but varying from five to ten stamens. April, May. Newfoundland. 1763. E. S.

3. *L. Buxifo'lium*. *Box-leaved Ledum*. "Leaves ovate, oblong, flat, smooth on both sides:" a smaller shrub than either of the preceding; flowers about a quarter of the size, white, in corymbs; leaves a quarter of an inch long, shining above. May. Carolina. 1736. E. S.

These shrubs cannot be preserved in gardens unless planted in bog earth, in a shady situation, and frequently watered.

XVII. *DIONÆ'A*, one of the names of Venus; this flower is so called from its elegance and delicacy. Nat. ord. *Linn.* *Gruinales*. *Juss.* uncertain. 1 Species.

1. *D. Musci'pula*. *Venus's Fly Trap*. Flower-stalk solitary, radical, a span high, bearing a corymbus of elegant white flowers, with pellucid veins; leaves radical, numerous, spreading on the ground, obovate, terminated by two hemisphærical lobes, strongly toothed at their outer edge, coloured and glandular within; on the inside of each lobe are three irritable bristles, which, when touched, cause the two lobes to fold together like a rat-trap: insects are frequently thus imprisoned. August. Carolina. 1768. P. Gr. Ho.

XVIII. *ANDRÓ'MEDA*, from the daughter of Cepheus, changed into a constellation, these plants



being found in northern latitudes. Nat. ord. *Linn.*  
*Bicornes.* *Juss.* *Ericæ.* 26 Species

1. *A. Maria'na.* *Maryland Andromeda.* "Peduncles aggregate, branched; corollas ovate, cylindric; leaves oblong, ovate, entire, deciduous;" anthers without awns; corolla of an herbaceous green colour; the leaves vary from oblong to oval. June, July. North America. 1736. S.

2. *A. Ferrugi'nea.* *Rusty-leaved Andromeda.* "Peduncles aggregate, axillary; corolla somewhat globose; leaves elliptic, quite entire beneath, scaly, ragged." July. North America. 1774. S.

3. *A. Pulverulen'ta.* *Mealy-leaved Andromeda.* "Peduncles aggregate, branching, axillary; corollas globular, bell-shaped;" leaves oval, crenate, mealy beneath; a bushy shrub; flowers in bunches, nodding, white, much like those of the Lily of the Valley; sweet scented. June to September. Carolina. 1800. S.

4. *A. Polifo'lia.* *Marsh Andromeda, or Wild Rosemary.* "Peduncles aggregate, terminating; leaves alternate, lanceolate, revolute, glaucous underneath;" a shrub from six to twelve inches high; flowers fleshy, nodding, pink; calyx red. It varies with 1. Leaves oblong, North America; 2. Leaves lanceolate, Britain; 3. Leaves linear, Newfoundland; all elegant little shrubs. May to September. S.

5. *A. Panicula'ta.* *Panicled Andromeda.* "Clusters terminal, panicled; corolla roundish; leaves ovate, entire;" stem about four feet high; flowers in



loose spikes ; anthers awned ; leaves alternate, slightly crenate. June. North America. 1748. S.

6. A. Arbo'rea. *Tree Andromeda, Sorrel Tree.* "Panicles terminating ; corolla rather downy ; leaves elliptic, pointed with small teeth ;" a tall shrub, with slender branches, bending downwards ; flowers in long naked spikes from the sides of the branches, of an herbaceous green colour, ranged on one side of the stalk. July to September. North America. 1752. S.

7. A. Acumina'ta. *Acute-leaved Andromeda.* "Racemes axillary, simple ; leaves ovate, lanceolate, acuminate, serrate : " a shrub about four feet high, upright, smooth ; branches round, leafy ; flowers white, smelling like honey ; calyx green. August. North America. 1765. S.

8. A. Calycula'ta. *Box-leaved Andromeda.* "Peduncles solitary, axillary, pointing one way ; floral leaves two ; leaves oval, scaly, dotted, a little serrate : " a low shrub, leaves like those of box ; flowers in short spikes, white. There are three varieties : 1. with globose corollas ; leaves oblong, lanceolate ; Russia : 2. with oblong, cylindric corollas ; leaves oblong, ovate, obtuse, Newfoundland : 3. with oblong, oval corollas ; leaves oblong, lanceolate. North America. February to April. 1748. S.

These are hardy, deciduous shrubs, with much the habit of *Erica*, or *Heath*. They delight in moist ground.



Some recent species have been introduced from North America.

XIX. RHODODEN'DRON, from  $\rho\delta\delta\omega$ , a rose, and  $\delta\alpha\delta\phi\omega$ , a tree. Nat. ord. *Linn.* Bicornes. *Juss.* Rhododendra. 10 Species.

1. *R. Ferrugi'neum.* *Rusty-leaved Rhododendron.* "Leaves smooth, shining above, rusty beneath; clusters terminal; corolla funnel-shaped; calyx fringed;" stem about two feet high, bushy; leaves evergreen, stalked, alternate, egg-oblong; flowers in terminal roundish clusters, rose coloured, with palish dots, or sometimes white. May to July. The Alps. 1752. E. S.

2. *R. Hirsu'tum.* *Hairy Rhododendron.* "Leaves elliptic, obovate, fringed, dotted beneath; corolla funnel-shaped;" resembling the foregoing; flowers more pink; leaves shorter, fringed with hairs, their underside not rusty, yet having dots. May, June. The Alps. 1656. E. S.

3. *R. Dau'ricum.* *Daurian Rhododendron.* "Leaves elliptic, oblong, dotted, naked; corolla nearly wheel-shaped;" leaves dotted on both sides with minute scales, the midrib downy; flowers rose coloured, nearly sessile; flowers appearing before the leaves. January to March. Siberia. 1780. E. S.

4. *R. Chamæcis'tus.* *Thyme-leaved Rhododendron.* "Leaves obovate, acute, fringed, polished, almost veinless; corolla wheel-shaped;" leaves thick, highly



polished; flowers purple; calyx with hairy segments; anthers purple. June. Austria. 1786. E. S. Gr. Ho.

5. *R. Pon'ticum*. *Purple Rhododendron*. "Leaves oblong, smooth, even on both sides; corymbs terminal; segments of the calyx oval, obtuse; corolla bell-shaped, spreading;" stem five feet high, with brown spreading branches; leaves evergreen, egg lance-shaped, acute, shining; flowers large, purple, many together. May, June. The Levant. 1763. E. S.

6. *R. Maximum*. *Laurel-leaved Rhododendron*. "Leaves oblong, convex, veined above, smooth and pale beneath; corymbs surmounted by the branches; segments of the calyx oval, obtuse; corolla bell-shaped, spreading;" stem, in its native soil, fifteen feet high; flowers paler than in the preceding, with green and yellow dots on their upper segments; flowers somewhat in umbels. June to August. North America. 1736. E. S.

7. *R. Chrysanthum*. *Yellow Official Rhododendron*. "Stem decumbent; leaves veined, smooth on both sides, paler beneath; umbels terminating; corolla nearly wheel-shaped," yellow, nodding; three upper segments streaked with dots; leaves ovate, narrowing to the stalk. June, July. Siberia. 1796. E. S.

The last is the species whose leaves have been introduced into medicine, for rheumatic and other disorders.



The fifth is the most frequently seen in gardens; male varieties are obtained between it and the *Azaleas*. It was thought that the reputed poisonous quality of the honey in Pontus was owing to this plant; but it may be equally attributed to the *Azalea Pontica*, the effluvia of whose flowers is certainly noxious. All the species are of eminent beauty.

XX. *KAL'MIA*, in honour of Peter Kalm, the pupil and friend of Linnæus. Nat. ord. *Linn. Bicornes*. *Juss. Rhododendra*. 4 Species.

1. *K. Latifolia*. *Broad-leaved Kalmia*. "Leaves ovate, ternate, scattered; corymbs terminal;" stems ten or twelve feet high, branched; leaves rigid, on short stalks, bright green above, paler beneath; flowers in a round bunch, of a pale blush colour, beautifully variegated with crimson. May to July. North America. 1734. E. S.

2. *K. Angustifolia*. *Narrow-leaved Kalmia*. "Leaves lanceolate; corymbs lateral;" stem from three to six feet high, divided into small woody branches; leaves stalked, obtuse, scattered; flowers in loose lateral branches, at first of a bright red, fading to a peach colour. May to July. North America. 1736. E. S.

3. *K. Glauca*. *Glaucous Kalmia*. "Leaves opposite, oblong, obtuse, smoothish, glaucous beneath, revolute at the margin; corymbs terminal; peduncles and calyxes very smooth;" shrub about two feet



high; stems branched, reddish brown; leaves embracing the stem; flowers on long stalks, about five or six in a bunch, of a beautiful pink. April, May. Newfoundland. 1767. E. S.

4. K. Hirsu'ta. *Hairy Kalmia*. "Leaves opposite and alternate, elliptic, hairy; flower-stalks axillary, single flowered;" stem upright, slender, about three feet high; leaves small, numerous, bright green; flowers purplish, axillary, growing on a single stalk. August, September. South Carolina. 1786. S.

The whole genus is remarkable for its elegant flowers and foliage, and is a general favourite in gardens. The plants thrive best in a boggy soil. They are said to be poisonous to sheep and cattle in their native place of growth.

XXI. EPIGÆ'A, from ἐπι, upon, and γη, the earth; expressive of the prostrate growth of the plant. Nat. ord. *Linn.* Bicornes. *Juss.* Ericæ. 2 Species.

1. E. Ré'pens. *Creeping Epigæa*. "Leaves ovate, inclining to heart-shaped; entire, tube of the corolla cylindric;" stems many, creeping, woody, leafy; leaves alternate, on hairy foot-stalks; flowers in terminal dense clusters, fragrant, of a pale blush-colour, each about the size of a small cowslip; a plant difficult to preserve in gardens. July to September. North America. 1736. S.

XXII. GAULTHERIA, named by Kalm, in honour of a French Physician, Gautier, who was settled in



Canada. Nat. ord. *Linn.* Bicornes. *Juss.* Ericæ. 2 Species.

1. *G. Procumbens.* *Trailing Gaultheria.* "Leaves obovate, pointed, slightly serrate, smooth, crowded about the tops of the branches;" stems procumbent in their lower part, then ascending, subdivided; flowers axillary, solitary, stalked, drooping, white, with a reddish calyx, which becomes a scarlet spongy berry; every part of the plant is somewhat of an aromatic flavour. July. North America. 1762. E. S.

XXIII. *ARBUTUS*, supposed to be a sort of diminutive from *arbores*, a tree; it being a pretty shrub. Nat. ord. *Linn.* Bicornes. *Juss.* Ericæ. 10 Species.

1. *A. Une'do.* *Common Strawberry Tree.* "Stem arboreous; leaves oblong, lanceolate; panicles smooth, nodding; berries many seeded," evergreen; berry strawberry-like, red, sweetish; stem twenty feet high and upwards, putting out branches near the ground; at the latter end of the year it makes a beautiful appearance, bearing the fresh flowers, together with the fruit of the preceding year, in fine contrast with the leaves. It varies, 1. with white flowers; 2. with red flowers, 3. with double flowers. September to December. Ireland. E. T.

2. *A. Andrach'ne.* *Oriental Strawberry Tree, Andrachne.* "Stem arboreous; leaves ovate, entire, serrate; panicles pubescent, erect;" a middle sized tree; branches irregular; leaves large, smooth; flow-



ers like those of the former species ; fruit oval. March, April. The Levant. 1724. E. T.

3. A. Alpina. *Black-berried Alpine Arbutus*. "Stems procumbent ; leaves wrinkled, serrate ;" branches trailing ; leaves alternate, ovate ; flowers in reflex clusters, white ; berries globular, on a small red calyx, about the size and colour of a sloe ; maukish. April. May. Scotland. E. S.

4. A. U'va Ur'si. *Trailing Arbutus, or Bear Berry*. "Stems procumbent ; leaves entire ;" branches trailing two or three feet on the ground ; leaves firm and rigid, like those of box ; flowers flesh colour, in small terminal clusters ; berries red, the size of a holly berry ; the leaves are very astringent. April to June. Britain. E. S.

XXIV. STY'RAX ; the *Στυράξ* of Theophrastus, and that from *στυρεος*, firm. Nat. ord. *Linn.* Bicornes. *Juss.* Guaiacana. 4 Species.

1. S. Officina'le. *Official Storax*. "Leaves ovate, bluntish, wavy, entire, downy beneath ; clusters simple, of few flowers ;" stem about ten feet high, bushy, with irregular branches ; leaves deciduous, alternate, stalked, much like those of the Quince ; flowers from five to six, white ; fruit leathery, the size of a Gooseberry. July. The Levant. 1597. S.

2. S. Grandifo'lium. *Large-leaved Storax*. "Leaves obovate, acute, somewhat toothed, downy beneath ; clusters simple, elongated, many flowered ;" lower



flower-stalks axillary, one-flowered; leaves larger, flowers smaller than in the last; clusters very downy; a handsome shrub. July. South Carolina. 1765. S.

3. *S. Læviga'tum*. *Smooth Storax*. "Leaves elliptic, lanceolate, acute at each end, unequally serrate, nearly smooth on both sides; flowers mostly axillary, solitary, or in pairs;" a shrub three or four feet high; flowers small, white, drooping. July. Carolina. 1765. S.

The fragrant Gum Storax is the production of the first species, and is obtained by wounding the bark. The tree requires considerable heat, as it is only from Asia Minor that we receive the gum in perfection; as it will not flow from the trees either in France or Italy. The wood is used in Rome to perfume the apartments of the great; a handful being thrown on a brasier.

#### *Order Digynia.*

XXV. *CHRYOSPLE'NIUM*, from χρυσος, gold, and σπλην, the spleen; on account of the colour of the flower, and the supposed virtue of the plant in diseases of the spleen. Nat. ord. *Linn.* Succulentæ. *Juss.* Saxifragæ. 2 Species.

1. *C. Alternifo'lium*. *Alternate-leaved Golden Saxifrage, or Sen Green*. "Leaves alternate," kidney-shaped, doubly crenate; stem three-sided; flowers gold coloured, in a forked leafy corymbus; plant succulent, tender. May. Britain. P.

2. *C. Oppositifo'lium*. *Opposite-leaved Golden Saxifrage, or Sen Green*. "Leaves opposite;" stems



creeping, square ; leaves spreading, roundish, stalked, yellowish green ; flowers lemon colour, often octandrous ; plant more common than the preceding. April, May. Britain. P.

XXVI. HYDRAN'GEA, from *ὕδωρ*, water, and *αἶψος*, a vessel ; in allusion to the pitcher-like shape of the seed vessel. Nat. ord. *Linn.* Succulentæ, *Juss.* Caprifolia. 4 Species.

1. H. Arbores'cens. *Shrubby Hydrangea*. "Cymes naked ; leaves ovate, smooth, toothed, alternate ; stamens longer ;" stems several, soft, pithy, from three to four feet high ; leaves opposite, veined, deep green above, pale beneath ; flowers small, white, of a pleasant scent ; stamens eight or ten. July, August. Virginia. 1736. S.

2. H. Horten'sis. *Garden Hydrangea, Chinese Guelder Rose*. "Cymes radiate ; leaves elliptic, tapering at both ends, toothed, smooth ;" stems erect, shrubby ; branches opposite, leafy, speckled with purple ; leaves opposite, curved back, bright green ; clusters of flowers terminal, green when young, changing to a rose colour, and again turning green in decay ; stamens six to ten ; cymes much resembling the Common Guelder Rose, and, like that, the outer or radiate flowers are abortive. May to September. China. 1788. Gr. Ho. S.

XXVII. SAXI'FRAGA, from *saxum*, a rock, and



*frango*, to break; several of the species growing in the fissures of rocks. Nat. ord. *Linn.* Succulentæ. *Juss.* Saxifragæ. 40 Species.

\* *Leaves undivided, stem mostly naked.*

1. *S. Cotyle'don.* *Pyramidal Saxifrage.* "Radical leaves aggregate, tongue-shaped, with sharp cartilaginous serratures; stem panicled, somewhat leafy; calyx hairy, viscid;" leaves dark green, fleshy, smooth, forming dense rose-like tufts; stem two to three feet high, reddish, hairy; panicle large, pyramidal, of innumerable white flowers; petals three-ribbed, without dots or stains. May to July. The Alps. 1596. P.

2. *S. Aïzoon.* *Marginated Saxifrage.* "Radical leaves aggregate, tongue-shaped, with sharp cartilaginous serratures; stem racemose, somewhat leafy; calyx naked, smooth; petals dotted;" plant about a foot high; petals cream coloured, with tawny or reddish dots; some Botanists esteem it a variety only of the preceding. June. The Alps. 1731. P.

3. *S. Muta'ta.* *Saffron-coloured Saxifrage.* "Radical leaves aggregate, tongue-shaped, with a cartilaginous, notched, fringed border, not serrated; stem panicled, leafy, hairy, and viscid, like the calyx; petals lanceolate;" flowers copious; petals orange coloured, with a purple centre. This also is thought to be only a variety of the first species. June. The Alps. 1731. P. Gr. Ho.

4. *S. Pensylva'nica.* *Pennsylvanian Saxifrage.*



"Leaves elliptic, lanceolate, hairy, obtusely notched; stem leafless; flower-stalks alternate, bearing corymbose heads;" flowers in small greenish tufts; leaves large, erect. June. North America. 1732. P.

5. *S. Cæsia*. *Grey Saxifrage*. "Radical leaves aggregate, spoon-shaped, recurved, tiled downwards, fringed at the base, dotted on the upper side; petals thrice as long as the calyx;" leaves in tufts; stems slender, reddish, terminating in white flowers, from one to four in number. May, June. The Alps. 1752. P.

6. *S. Bryoides*. *Thread Moss Saxifrage*. "Radical leaves aggregate, lanceolate, pointed, smooth, with a cartilaginous, fringed margin; stems downy, with few flowers; calyx obtuse, nearly smooth; petals white," dotted in their lower half with yellow. June. The Alps. 1752. P.

7. *S. Crassifolia*. *Thick-leaved Saxifrage*. "Leaves leathery, roundish, oval, abrupt, stalked, serrated, smooth; stem naked; panicle dense, cymose;" stems from the axils of the last year's leaves; leaves broad, shining; flowers copious, light purple; flower-stalks thick, short, round; corolla funnel-shaped; a variety with heart-shaped leaves has been made the species, *S. Cordifolia*. March, April. Siberia. 1765.

8. *S. Sarmiento'sa*. *Chinese Saxifrage, or Bear's Ear*. "Leaves roundish, toothed, hairy, runners creeping; two of the petals elongated;" trailing



and they are in blossom about the same time. The leaves are opposite, ovate, with long petioles. The flowers are small, and the fruit is a small, round, red berry. The plant is very common in the fields and along the roads. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes. It is a very common plant, and is found in many places. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes.

*Trifolium pratense*. Leaves trifoliate, ovate, with long petioles. The flowers are small, and the fruit is a small, round, red berry. The plant is very common in the fields and along the roads. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes. It is a very common plant, and is found in many places. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes.

*Trifolium repens*. Leaves trifoliate, ovate, with long petioles. The flowers are small, and the fruit is a small, round, red berry. The plant is very common in the fields and along the roads. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes. It is a very common plant, and is found in many places. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes.

*Trifolium hybridum*. Leaves trifoliate, ovate, with long petioles. The flowers are small, and the fruit is a small, round, red berry. The plant is very common in the fields and along the roads. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes. It is a very common plant, and is found in many places. It is a very hardy plant, and will grow in any soil. It is a very useful plant, and is used for many purposes.



marked with a yellow dot; akin to the former, but not more than half the size. May, June. The Alps. 1768. P.

12. *S. Ge'um. Kidney-leaved Saxifrage.* "Leaves roundish, kidney-shaped, sharply toothed; stem naked, panicle; calyx reflected, inferior;" petals white, with one yellow spot and a purplish claw; leaves erect, not forming little roses. June, July. Ireland. P.

\*\* *Leaves undivided, stem leafy.*

13. *S. Oppositifolia. Purple Saxifrage.* "Leaves opposite, ovate, obtuse, fleshy, fringed, the lower leaves tiled, keeled, abrupt;" stems branched, prostrate, entangled, composing dense evergreen tufts; flowers longer than the leaves, terminal, mostly solitary; petals of a purplish crimson, unspotted. March, April. Britain. P.

14. *S. As'pera. Rough Saxifrage.* "Leaves lanceolate, alternate, fringed; stems procumbent; germ superior;" the stems form tufts, as in the preceding, but the leaves are acute, long, almost linear; flowers cream-coloured, somewhat panicle, on long slender stalks. August. The Alps. 1752. P.

15. *S. Hir'culus. Yellow Marsh Saxifrage.* "Leaves lanceolate, alternate, without teeth or fringe; stem erect; germ ovate, superior;" stems a span high, hairy, simple; flowers from one to three at the top of the stem, large, showy, yellow,



spotted with saffron colour at the base. August. England. P.

16. *S. Alaudina*. *Willow Mountain Saxifrage*. "Leaves alternate, linear, with fringe-like teeth; stem decumbent at the base; germ depressed, half inferior;" stems smoothish; flowers several, terminating each branch, yellow, handsome, dotted with red. July, August. Britain. P.

17. *S. Rotundifolia*. *Round-leaved Spotted Saxifrage*. "Radical and stem leaves kidney-shaped, toothed, stalked; stem panicled; calyx inferior, spreading;" stem a foot high, erect, leafy, branched at the top, where it forms a hairy panicle of elegant flowers, with white petals, copiously dotted with crimson. May, June. Switzerland. 1582. P.

\*\*\* *Leaves lobed. Stems erect.*

18. *S. Geranioides*. *White Saxifrage*. "Leaves kidney-shaped, lobed; stem panicled, root granulated, or resembling grains of corn; germ half inferior;" herbage rather hairy; flowers loosely panicled, large, white, unspotted; calyx brown or reddish, viscid; a variety with double flowers is common in gardens. May. Britain. P.

19. *S. Geranioides*. *Crane's bill-leaved Saxifrage*. "Radical leaves, kidney-shaped, five lobed, subdivided; stem leaves digitate, with linear segments; stem corymbose, many flowered;" calyx hairy, its segments linear, lanceolate; leaves numerous, and



spreading on the lower branches ; stem erect, bearing numerous whitish flowers in compound panicles ; petals and calyx remarkably lengthened. April, May. The Pyrenees. 1770. P.

20. *S. Ajugifo'lia. Bugle-leaved Saxifrage.* " Leaves somewhat palmate, with three or five linear, obtuse, roughish segments ; stem leaves undivided ; stem ascending, panicled ;" calyx downy, viscid ; leaves numerous, clothing the branches ; flowers small, cream coloured or greenish, sometimes tinged with purple. June. France. 1770. P.

21. *S. Tridactylites. Rue-leaved Saxifrage.* " Leaves wedge-shaped, with three to five segments, uppermost undivided ; stem panicled ;" stem from one to six inches high, growing on walls, downy, viscid ; flowers small, white. April, May. Britain. A.

22. *S. Cæspito'sa. Tufted Alpine White Saxifrage.* " Radical leaves aggregate, linear, wedge-shaped, undivided, three or five cleft, fleshy, ribbed beneath ; stem nearly naked, with very few flowers ;" leaves dark green, fleshy ; stem two or three inches high ; flowers large, white : some varieties of this seem to have been needlessly erected into distinct species. June to August. Wales. P.

\*\*\*\* *Leaves lobed. Stems procumbent.*

23. *S. Hypnoi'des. Mossy Saxifrage, or Lady's Cushion.* " Leaves linear, undivided, or three lobed, pointed ; shoots procumbent ; stem somewhat leafy, with a corymbose panicle ; petals elliptic ;" long



shoots forming dense mossy tufts, of a light green; flowers from three to eight in each panicle, greenish white; it grows on shady walls, or on rock-work; the plant is thickly set with short hairs, terminated by red globules. April to June. Britain. P.

These are all the species of Saxifrage that are likely to be met with in English cultivation; several rare Alpine species are detailed in botanical catalogues, but they are little known, and not very well defined, numerous varieties having been frequently erected into new species; several of the above described have been long in favour, for their singular elegance and beauty. Nos. 3, 5, 8, 13, 14, 15, 16, require some defence from the severity of our frosts; being mountainous plants, in their native habitations they are buried in the snow, and protected till a late period in the spring.

XXVIII. TIAREL'LA, diminutive of *tiara*, the Persian diadem; alluding to the form of the seed vessel. Nat. ord. *Linn.* Succulentæ. *Juss.* Saxifragæ. 2 Species.

1. *T. Cordifolia.* *Heart-leaved Tiarella.* "Leaves heart-shaped, acutely lobed, with pointed teeth;" cluster simple, ovate; leaves several, all radical, hairy, lobed, veined, stalked; flower-stalk mostly solitary, bearing a downy cluster of small delicate white flowers; after ripening the capsules become deflexed. April, May. North America. 1731. P.

XXIX. MITEL'LA, in allusion to the form of its



ripe seed-vessel, which resembles a little mitre. Nat. ord. *Linn.* Succulentæ. *Juss.* Saxifragæ. 3 Species.

1. *M. Diphyl'la*. *Two-leaved Mitella*. "Leaves heart-shaped, slightly three-lobed, toothed; stalk with two opposite leaves;" stem a span high, a little hairy, pale green; flower-stalk upright, ending in a downy, rather viscid, cluster of small white flowers; petals fringed, feather-like. April, May. North America. 1731. P.

XXX. *GYPSO'PHILA*, from γυψος, lime, or plaster, and φιλω, to love; the plant growing on a lime-stone soil. Nat. ord. *Linn.* *Juss.* Caryophyllei. 13 Species.

1. *G. Prostra'ta*. *Trailing Gypsophila*. "Leaves linear, lanceolate, smooth; stems diffuse, much branched; joints reddish, many flowered; styles prominent;" flowers small, white, in a three forked panicle. June to September. Supposed from the Alps. 1759. P.

2. *G. Stru'thium*. *Fleshy-leaved Gypsophila*. "Leaves linear, fleshy, semi-cylindrical, axillary; leaves clustered;" stem erect, twelve or eighteen inches high, woody below, leafy; leaves succulent, glaucous; flowers white, numerous, in dense round paniced tufts. This herb is said to be used by the Spaniards, as it was by the ancients, in place of soap. July, August. Spain. 1729. P.

3. *G. Perfolia'ta*. *Perfoliate Gypsophila*. "Leaves ovate, lanceolate, many-ribbed, half clasping the



stem ;" stem two to three feet high, branched, leafy ; flowers pale red, copious, in loose forked spreading panicles : a downy variety is *G. Tomentosa*. July, August. The Levant. 1732. P.

4. *G. Mura'lis*. *Wall Gypsophila*. "Leaves linear, flat ; calyx without floral leaves ; stem much branched ; petals crenate ;" a small bushy herb, growing on walls ; stem forked, panicked ; leaves opposite, narrow ; flowers copious, small, pink, on slender spreading stalks ; petals veined. June to September. Germany. 1739. P.

These plants having little beauty, are rarely seen, unless in botanical gardens ; some other species were also cultivated at Chelsea, by Mr. Miller, some seventy or eighty years ago ; but are scarcely to be found elsewhere in England, and perhaps now not there.

XXXI. SAPONA'RIA, from *sapo*, soap ; the leaves lathering in water like soap. Nat. ord. *Linn. Juss.* Caryophyllei. 9 Species.

1. *S. Officina'lis*. *Common Soap Wort*. "Calyx cylindrical, with shallow teeth ; claws of the petals with four wings ; leaves egg lance-shaped, three ribbed ;" stems numerous, about eighteen inches high, erect, round, leafy, jointed ; panicles terminal, forked, of numerous large pale pink flowers, sweet scented ; corolla often double. July to October. England. P.

2. *S. Vacca'ria*. *Perfoliate Soap Wort*. "Calyx pyramidal, five cornered ; leaves ovate, acuminate,



sessile;" stem one or two feet high, round, leafy, repeatedly forked above; corymbose, many flowered; leaves opposite, clasping the stem, rather heart-shaped at the base; flowers pink; calyx tinged with dull purple, inodorous; a plant sowing itself spontaneously. July, August. Germany. 1596. A.

3. *S. Porrigens*. *Hairy Soap Wort*. "Calyx deeply divided, downy and viscid; panicle widely spreading; fruit pendulous;" leaves single, ribbed; stem terminated by a large panicle of innumerable small pink long-stalked flowers; leaves smooth, rather succulent. July, August. The Levant. 1689. A.

4. *S. Ocymoides*. *Basil-leaved Soap Wort*. "Calyx swelling upwards, woolly; stems forked, procumbent; leaves elliptic; petals nearly entire;" stems many, reddish, hairy; flowers abundant from the numerous forks of the stem, rose-coloured; calyx hairy, dark red; a plant suited to adorn artificial rock-work. May to July. Italy. 1768. P.

XXXII. DIANTHUS, from *διος*, of Jove, and *αἶθος*, a flower; from its beauty and fragrance. Nat. ord. *Linn. Juss.* Caryophyllei. 32 Species

\* *Flowers aggregate.*

1. *D. Barbatus*. *Bearded Pink*, *Sweet William*. "Flowers in several bundles; scales of the calyx ovate, awl-shaped, as long as the tube; leaves lanceolate;" stem upright, jointed, branched; leaves soft, connate; bundles of flowers compact, sessile;



corolla varying with different hues of purple, red, and white; sometimes double. June, July. Germany. 1573. P.

2. *D. Carthusiano'rum*. *Carthusian Pink*. "Flowers somewhat aggregate; scales of the calyx ovate, awned, shorter than the tube; leaves linear, with three ribs;" involucre oblong, awned, shorter than the head of flowers; flowers red, with hairy petals. July, August. Italy. 1573. P.

3. *D. Atro'rubens*. *Dark red Italian Pink*. "Flowers in clustered heads; scales of the calyx ovate, awned, shorter than the tube; involucre awned, ovate, as long as the head of flowers; leaves linear, lanceolate, nerveless," connate at the base; calyx brown, closely scored with lines; corolla scarlet; petals rhomb-shaped, with few unequal teeth, nearly scentless. Italy. July. 1802. P.

4. *D. Ferrugi'neus*. *Rusty Pink*. "Flowers aggregate; petals cleft; the segments three-toothed," reddish underneath; yellow, or of a rusty iron colour within; leaves somewhat grassy, keeled. August. Italy. 1756. B.

5. *D. Arme'ria*. *Deptford Pink*. "Flowers aggregate, in bundles; scales of the calyx lanceolate, hairy, as long as the tube;" stem a foot high, pubescent, swelling at the joints; leaves linear, lanceolate, connate; heads of few flowers; petals serrated, red, with white dots. July, August. England. A.

6. *D. Pro'lifer*. *Proliferous Pink*. "Flowers



aggregate, in heads; scales of the calyx ovate, obtuse, awnless, membranous, longer than the tube;" stem smooth, a foot high, at each joint a pair of awl-shaped leaves, connate; flowers in a crowded head, three or four together; corolla slightly cleft, rose coloured; flowers opening one at a time. July, August. England. A.

"\* *Flowers solitary; but many on the same stem.*

7. *D. Caryophyllus. Clove or Carnation Pink.* "Scales of the calyx somewhat rhomboid, very short; petals crenate, beardless;" stem decumbent at bottom, jointed, branched; leaves smooth, linear, glaucous, in pairs at the joints; petals with long claws, very finely serrate at the border. In its wild state the claw is green, the border rose colour; when cultivated its varieties of colour and luxuriance are innumerable. Florists make two divisions, Carnations and Pinks; the latter are distinguished by an eye-like spot, and more humble growth; some of them difficult to distinguish from the varieties of *D. Plumarius*. June to August. England. P.

8. *D. Chinen'sis. China or Indian Pink.* "Scales of the calyx awl-shaped, spreading, leafy, as long as the tube; petals crenate; leaves lanceolate;" flower-stalks branching out on every side, terminated by a single flower, without scent, but with great variety of colours; often double. July to September. China. 1713. B.

9. *D. Deltoïdes. Maiden Pink.* "Scales of the



calyx ovate, lanceolate, acute, two or four; leaves bluish, somewhat downy; petals crenate;" barren stems numerous, reclining; flowering stems erect, sometimes sickled: leaves in pairs, linear, slightly downy: petals red above, pale underneath, with a ring of deeper red dots near the centre of the flowers. June to October. Britain. P.

10. *D. Plumarius*. *Feathered Pink*. "Scales of the calyx somewhat ovate, very short, blunted, awless; corollas many cleft;" leaves pointed; flowers one or two at the end of the stems, sweet-scented; petals large, deeply jagged, light red or bright purple, sometimes white, with a circle of red, downy at the base of the border. June to August. Europe. 1629. P.

11. *D. Superbus*. *Superb Pink*. "Flowers panicled: scales of the calyx very short, acuminate; petals cloven into many capillary or thread-like segments;" stem procumbent at the base, then erect, round, smooth: leaves connate, lanceolate, linear, rough on the edge: flowers erect, pale red, sometimes white, sprinkled with blood-coloured spots, hairy at the base of the border; smelling sweet towards the evening: calyx slender, scored. July to September. France. 1396. B.

\*\*\* *Stem one-flowered, herbaceous.*

12. *D. Cæsius*. *Mountain Pink*. "Scales of the calyx roundish, short: petals crenate, pubescent; leaves rugged at the edge;" teeth of the calyx shining at the edge; stalks several, a span high; leaves



linear, glaucous ; petals flesh-coloured, with a double row of blunt notches marked with lines ; fragrant. June. July. Britain. P.

13. *D. Alpinus*. *Alpine Pink*. "Petals crenate, outer scales of the calyx leafy, nearly as long as the tube ;" stems many, a finger's length ; leaves linear, bluntish, flat ; corolla large, with numerous short teeth ; throat somewhat downy ; flowers red, scentless, more than one on each stem. June, July. The Alps of Austria. 1729. P.

This fragrant and beautiful genus has been a favourite from the time of our remote ancestors to the present day : the rich, spicy odour, and brilliant colours of the Carnation, have recommended it to the peculiar attention of florists, who have produced several hundred varieties. They have distributed them into four divisions : 1. Flakes, having two colours only, the stripes large, and going through the petals. 2. Bizarres, with flowers striped or variegated with three or four colours. 3. Piquettées, having a white ground, and spotted or pounced with scarlet, purple, or other colours. 4. Painted ladies, with petals, red or purple, on the upper side, and entirely white beneath. These distinctions, however, often intrude upon each other. A fine Carnation should be strong in the stem, well able to support the flower erect ; the petals of easy expansion, and without notch or fringe ; the middle of the flower not too high ; the colours bright and equally marked, the outside of the flower perfectly round ; the calyx should be an inch in length, strong enough to keep the petals in a close body ; it is, however, apt to burst, to prevent which accident it should be tied.

The Clove Pink is a variety having a large deep red



flower, affording a strong scent of the clove spice. Its petals are used to give colour and flavour to an official syrup.

The varieties of the Common Pink, *D. Plumarius*, are nearly equal in number with those of *D. Caryophyllus*, but have not attracted the same attention. The Sweet William, *D. Barbatna*, has its varieties also, but not so numerous; one, with narrow leaves, was anciently called The Sweet John. This species was formerly more in favour than at present, having been used, as Gerarde expresses it, "to deck up gardens, the bosoms of the beautiful, garlands and crowns for pleasure."

#### *Order Trigynia.*

XXXIII. ARENA'RIA, from *arena*, sand, its usual place of growth. Nat. ord. *Linn.* and *Juss.* Caryophyllei. 36 Species.

1. *A. Tetraquetra.* *Square Sand-wort.* "Leaves ovate, keeled, recurved, tiled four ways," stems nearly upright, very numerous, so as to form a tuft, shorter than the peduncles; flowers white, in a head, marked with lines, upon two cleft stalks. July. The Pyrenees. 1776. P.

2. *A. Balea'rica.* *Majorca Sand-wort.* "Leaves ovate, shining, rather fleshy; stem creeping; peduncles one flowered;" stems growing in tufts, creeping, and taking root; leaves stalked, opposite; flowers large, white, with two opposite, sessile, lanceolate, floral leaves. May to August. Minorca. 1787. P.

3. *A. Serpyllifo'lia.* *Thyme-leaved Sand-wort.* "Leaves ovate, nearly sessile, rough; calyx hairy,



five nerved ;" root small, fibrous ; stems many, spreading, rigid, forked at the top ; leaves small, pointed ; peduncles erect ; flowers small, white ; petals shorter than the calyx : a neat little plant, growing on walls. July. Britain. A.

4. *A. Grandiflora*. *Great-flowered Sand-wort*. "Leaves awl-shaped, stiff, flat ; radical leaves crowded ; stems one flowered," several ; flowers terminating, from one to four, upright ; calyx large, with unequal leaflets ; petals of the corolla very large, white, ovate. June to September. Switzerland. 1783. P.

A great part of the Sand-worts affect mountainous situations, and though of neat appearance, they have neither size nor brilliancy to be generally cultivated in gardens. We have no less than nine British species of *Arenaria*.

XXXIV. *STELLA'RIA*, from *stella*, a star, alluding to the star-like form of the flowers. Nat. ord. *Linn. Juss.* Caryophyllei. 17 Species.

1. *S. Dicho'toma*. *Forked Stitch-wort*. "Leaves ovate, sessile ; stem forked ; flowers solitary ; peduncles, when in fruit, reflexed ;" stem pubescent, repeatedly forked ; at each division of the stem a pair of leaves ; corolla white ; petals the length of the calyx, not very deeply divided. July. Siberia. 1774. P.

The Stitch-worts, like the preceding Sand-worts, which they much resemble, are placed in a similar situation : one of them, however, the *Stellaria Media*, or Common Chickweed, is a most troublesome intruder into every garden. The British species of this genus are eight.



XXXV. CUCUBALUS, from *κυκκος*, a berry, and *βαλλω*, to throw. Nat. ord. *Linn. Juss.* Caryophyllei.  
1 Species.

1. C. Bac'cifer. *Berry-bearing Chick-weed*. Stems several, about three feet high, weak, forked, hollow, rough with deflexed hairs; leaves opposite, stalked, widely spreading, ovate; flowers axillary and terminal, greenish white; calyx large, bell-shaped, membranous, pubescent; berry black, pulpy. June, July. England. P.

XXXVI. SILE'NE, from *σιελας*, saliva or foam, from the clamminess of its stalks. Nat. ord. *Linn. Juss.* Caryophyllei. 73 Species.

\* *Petals without a crown on the throat.*

*Arranged by Linnæus under the last genus, Cucubalus.*

1. S. Infla'ta. *Bladder Campion*. "Flowers panicled, drooping; petals cloven half way down, mostly naked; calyx smooth, netted with veins; stem erect," branched, glaucous; leaves egg lance-shaped, radical ones crowded, spoon-shaped; panicle forked; flowers numerous, white; calyx almost globose: when boiled, the leaves are said to partake of the flavour of green Peas. May to September. Britain. P.

2. S. Visco'sa. *Clammy Campion*. "Flowers lateral; stem undivided; leaves reflexed at the base;" stem a foot high, viscid at the top; root-leaves narrow, stem-leaves broader, viscid, woolly; calyx ten-



cornered; petals white, two parted; flowers not turned all one way, but nodding every way, smelling sweet at night. July. The Levant. 1739. B.

3. *S. Stella'ta*. *Four-leaved Campion*. "Leaves in fours;" stems slender, their lower joints furnished with leaves cross-wise, acute; flowers on long stalks, in pairs, opposite; corolla white, fringed. June to August. North America. 1696. P.

4. *S. Ita'lica*. *Italian Campion*. "Panicle corymbose, spreading, somewhat three forked; petals in two deep narrow segments; leaves spatulate, rough;" stem erect, leafy, somewhat branched above, but chiefly at the base, with purplish shoots; upper leaves lanceolate; calyx with ten roughish ribs; petals naked, cloven to the base, white above, veined with purple underneath. May, June. Italy. 1759. B.

5. *S. Oli'tes*. *Spanish Campion*. "Panicle erect, tufted; flowers diœcious; petals linear, undivided;" leaves spatulate, rough; stems slightly leafy, very viscid in the middle part of their upper joints; bottom leaves many, on long stalks; flowers small, with pale narrow petals, and a purplish calyx. July. August. England. P.

\*\* *Petals with a crown on the throat; flowers lateral, solitary.*

6. *S. Quinquevul'nera*. *Variegated Catch Fly*. "Hairy; petals roundish, entire; flowers lateral, alternate, erect, as well as the fruit;" calyx hairy,



clammy; petals blunt, scarcely notched, border white, with a blood-red spot in the centre. June to August. England. A.

7. *S. Nocturna*. *Spiked Night-flowering Catch Fly*. "Flowers spiked, alternate, nearly sessile, directed one way; petals deeply cloven; leaves spatulate, hairy;" petals small, pale pink or white with a green edge, said to expand only at night. July. France. 1683. A.

8. *S. Cerastioïdes*. *Cerastium-leaved Catch Fly*. "Hairy; petals cloven; crown divided with a pair of teeth at the base; stem much branched, spreading, somewhat forked; leaves linear, lanceolate;" flowers rose-coloured, spiked, not quite sessile; calyx white, with five green ribs. July. South of Europe. 1732. A.

\*\*\* *Flowers lateral, in clusters.*

9. *S. Nutans*. *Nottingham or Dover Catch Fly*. "Flower-stalks panicled, drooping one way; petals in two deep linear segments, the crown of two acute lobes; leaves lanceolate, downy;" stems several, herbaceous, erect; flowers white, expanding in the afternoon. June, July. Britain. P.

10. *S. Fruticosa*. *Shrubby Catch Fly*. "Panicle corymbose, close, somewhat three-forked; calyx club-shaped, rough; petals cloven, crown of four teeth; stem shrubby; leaves rough edged;" stem with numerous tufted branches, bearing level topped panicles of about fifteen flowers in each, pink within, veined



with green beneath; leaves recurved, spatulate, evergreen. July. Sicily. 1629. S.

11. *S. Viridiflora*. *Green-flowered Catch Fly*. "Stem branched; panicles elongated; loose, drooping, many flowered; petals divided half way, the crown of two linear lobes;" leaves elliptic, lanceolate, acute, downy; stem from one to two feet high, ending in a long panicle of drooping green flowers. July. Portugal. 1739. B.

\*\*\*\* *Flowers from the forks of the stem.*

12. *S. Vespertina*. *Pink Evening Catch Fly*. "Petals with two deep rounded lobes, the crown sharp, cloven; calyx downy; leaves spatulate; stems diffuse;" flowering branches naked below, terminating in a simple cluster of eight or ten pink flowers, drooping one way, with a reddish club-shaped calyx. July, August. Barbary. 1796. A.

13. *S. Behen*. *Bladder Catch Fly*. "Flowers in a corymbose panicle, nearly upright; petals deeply divided, rounded, segments of the crown notched; calyx veined with net work; leaves obovate, lanceolate;" the border of each petal only a quarter the length of its claw; flowers pale, purplish pink with white anthers; calyx obtuse. July. Crete. 1713. A.

14. *S. Pendula*. *Pendulous Catch Fly*. "Flowers racemose; calyx of the fruit pendulous, inflated, with ten rough ribs; stem decumbent;" leaves oval, acute; flowers from the axils, on short stalks, bright red;



stems purplish, spreading in every direction. May, June. Sicily. 1731. A.

15. *S. Noctiflora*. *Night-flowering Catch Fly*. "Stem forked; petals rather deeply cloven, with a short blunt crown; calyx with ten angles, connected by transverse ribs;" herb dark green, softly hairy, spreading; leaves lanceolate, three ribbed; flowers unfolding their pale blush-coloured petals in the evening only, smelling very sweet. July. England. A.

16. *S. Rubella*. *Small Red-flowered Catch Fly*. "Smooth; corymbose; calyx obovate; petals notched, with a rounded two-lobed crown; upper leaves ovate, lanceolate; capsule thrice as long as its stalk;" stem branched, leafy; flowers crowded into a level topped panicle, with one or two flowers in the forks of the branches, pale dull red. May, June. Portugal. 1732. A.

17. *S. Cretica*. *Cretan Catch Fly*. "Panicle sparingly branched; flowers erect; petals in two deep segments; the lobes of the crown acute, entire; lower leaves obovate, undulated, roughish;" stems two or three, erect, slender, viscid; upper leaves linear-pointed; flowers few, small, crimson; calyx smooth, purplish, ten ribbed. May to August. Isle of Candia. 1732. A.

18. *S. Muscipula*. *Red Spanish Catch Fly*. "Petals two-cleft; stem forked; flowers axillary, sessile; leaves smooth;" stem thickish, with stiff branches;



leaves ovate, lanceolate; calyx tubular, membranous; corolla small, of a deep rose-colour, a little longer than the calyx; the whole plant extremely viscid. July, August. Spain. 1596. A.

19. *S. Arme'ria. Common or Lobel's Catch Fly.* "Smooth, corymbose; calyx cylindric, club-shaped; petals notched; the crown sharp, two lobed; upper leaves heart-shaped; partial stalk as long as the capsule;" stem upright; leaves oblong, opposite; flowers terminating; the ends of the branches sub-dividing into forks close together; petals red, sometimes white; beneath each joint of the stem is a brown glutinous ring. July, August. England. A.

20. *S. Saxi'fraga. Saxifrage Catch Fly.* "Stems one flowered; flower-stalks the length of the stem; leaves smooth; flowers perfect, and female; petals cleft;" stems several, a finger's length, creeping; leaves opposite, linear, acute, from four to six pair; branches viscid; petals pale red, rolled inwards; calyx reddish, oblong. June to August. France and Italy. 1640. P.

The plants of this overwhelming genus are chiefly inhabitants of the South of Europe, of easy cultivation, and not remarkable for their beauty; some of the flowers are fragrant at night, which, more or less, is the case with most of the Pink tribe. Several of the Catch Flies being annuals spring up spontaneously in gardens: those above detailed are the species most likely to be met with; but it may chance that others may sometimes be found.



**XXXVII. GARDENIA**, named by Tournefort in honour of Dr. Gaidel, a French physician, who published a tale on Alpine plants. Nat. ord. *Linn. Mulsbergian.* *Juss. Ranunculaceae.* 1 Species.

1. *G. Nigellastrum.* *Fennel-leaved Gardella.* Stem one or two feet high, erect, branched; leaves chiefly on the lower part, finely twice wing-cleft, resembling Fennel, but flat; flowers solitary, of a greenish hue speckled with purple. June, July. South of France. 1738. A.

*Order Pentagynia.*

**XXXVIII. COYTLEDON**, from *coraca*, a cavity, because the leaves of some of the species are hollowed into a sort of basin. Nat. ord. *Linn. Succulentr.* *Juss. Semperviv.* 24 Species.

1. *C. Umbilicus.* *Common Navel-wort.* "Leaves peltate, crenate; stem spiked, nearly simple; flowers drooping; floral leaves entire; root tuberous;" whole plant fleshy; stem erect, cylindrical, leafy; root leaves numerous, on long stalks, concave; flowers tubular, yellowish, clustered, drooping. June, July. Britain. P.

2. *C. Lutea.* *Greater Yellow Navel-wort.* "Leaves crenate, toothed, the lowest somewhat peltate; stem spiked, nearly simple; flowers erect; floral leaves toothed; root creeping;" stem erect, reddish; stem leaves alternate, roundish; flowers on short stalks, in



a dense spike, bright yellow. July. A doubtful native of England. P.

3. *C. Hispanica*. *Spanish Navel-wort*. "Leaves oblong, nearly cylindrical; flowers in bundles;" stem simple, cylindrical, nearly erect, about five inches high; leaves alternate, sessile, with dusky red dots; corolla funnel-shaped, reddish on the outside, border purple. June, July. Africa. Spain. 1796. B.

These plants have nearly the same habit as the Sedums and Houseleek. If the seeds scatter themselves on walls or rock-work the plants will thrive better than when they are cultivated.

XXXIX. SE'DUM, from *sedere*, to sit, on account of its growing closely on rocks. Nat. ord. Linn. Succulentæ. Juss. Sempervivæ. 29 Species.

\* *With flat leaves.*

1. *S. Telephium*. *Orpine, or Live Long*. "Leaves flattish, serrated; corymb leafy; stem erect," stems two feet high, erect, simple, leafy, round, purplish; leaves scattered, sessile, ovate, fleshy, toothed in a serrate manner; flowers purple, sometimes white, forming terminal, many flowered, crowded, leafy tufts. July, August. Britain. P.

2. *S. Anacampseros*. *Evergreen Orpine*. "Leaves wedge-shaped, alternate at the base, nearly sessile; stems decumbent; flowers corymbose;" stems reddish, trailing at the base; leaves numerous, alternate, or scattered, ovate, fleshy, dotted at the tip, of a



blueish green; flowers deep lilac or purple, rarely white, in compact leafy tufts. August. South of France. 1596. P.

3. *S. Aizoon*. *Yellow Stone Crop*. "Leaves lanceolate, serrate, flat; stem erect; cyme sessile, terminating;" leaves alternate on every side, thick; stems several, a foot high; flowers bright yellow; petals lanceolate, erect, but spreading at the top. July to September. Siberia. 1757. P.

4. *S. Hybridum*. *Germander-leaved Stone Crop*. "Leaves wedge-shaped, concave, somewhat toothed, aggregate; branches creeping; cyme terminating;" stems numerous, two feet high, generally red; flowers sulphur-coloured, with keeled, sharp pointed petals. May, June. Siberia. 1776. P.

5. *S. Populifolium*. *Poplar-leaved Stone Crop*. "Leaves flat, heart-shaped, toothed, stalked; corymbs terminal; stem erect, slender, herbaceous," about a foot high, commonly of a bright red; leaves alternate, fleshy, brownish red; petals white, spreading; the plant much resembling *Saxifraga Rotundifolia*. July, August. Siberia. 1780. P.

6. *S. Stellatum*. *Starry Stone Crop*. "Leaves flattish, angular; flowers lateral, solitary, sessile;" stem upright, thick, wavy, pink at the base, brown at the top; leaves scattered, wedge-shaped, toothed, fleshy, scored and dotted; flowers solitary, terminal; petals of a delicate white with a pink line. June, July. France. 1640. A.



7. *S. Cepæ'a.* *Purslane-leaved Stone Crop.*  
"Leaves flat, lanceolate; stem branched; flowers  
panicled; petals acute, tipped with an awn;" stems  
procumbent, woody at the base, much branched,  
thickly beset with hairs and red dots; leaves alter-  
nate, remote, dotted; flowers numerous, in spreading  
panicles, white with a pink rib. July, August. France.  
1640. A.

\*\* *Leaves somewhat cylindrical.*

8. *S. Dasyphyl'um.* *Thick-leaved Stone Crop.*  
"Leaves opposite, ovate, obtuse, fleshy; stem weak,  
panicle glutinous;" stems decumbent, creeping,  
branched, tufted; leaves opposite, gibbous, tiled,  
succulent, tipped with red; flowers three or four to-  
gether, white with a purple streak. June, July. Eng-  
land. P.

9. *S. Reflex'um.* *Hanging-leaved Stone Crop.*  
"Leaves awl-shaped, scattered, loosened at the base,  
the lowermost recurved; flowers somewhat cymose;"  
stems round, leafy, spreading, entangled or pendent;  
leaves scattered, succulent, smooth, often reddish;  
flowers in a terminal cyme, bright yellow, numerous.  
June, July. Britain. P.

10. *S. Rupes'tre.* *Rock Stone Crop.* "Leaves  
thick, awl-shaped, glaucous, erect, clustered together  
in a five fold order, loose at the base; flowers in a  
cyme;" stems round, red, and naked at the lower  
part, terminating in thick club-shaped tufts of closely



tilled succulent leaves ; flowers in a close, thick, branched cyme, yellow. July, August. England. P.

11. *S. Hispanicum*. *Spanish Stone Crop*. "Leaves linear, round, depressed, scattered ; cymes flat ; flowers six-petaled ;" leaves pale green dotted with purple ; flowers white, star-like, stained with pale purple ; petals often seven ; plant, when full grown, somewhat downy. July. Spain. 1782. P.

12. *S. Album*. *White Stone Crop*. "Leaves oblong, cylindrical, obtuse, spreading, smooth ; panicle much branched ;" stem a span high, round, leafy, branched ; leaves scattered, spreading horizontally, glaucous, fleshy, juicy ; flowers white or reddish. June, July. England. P.

13. *S. Acre*. *Biting Stone Crop, Wall Pepper*. "Leaves alternate, somewhat ovate, fleshy, gibbous, fixed to the stem by their inner side above the base ; cyme three-cleft, leafy ;" stems tufted, branched, decumbent, smooth, round ; leaves alternate, tiled, grass green ; flowers erect, golden ; herb acrid and acid. June. Britain. P.

14. *S. Sexangulare*. *Insidious Stone Crop*. "Leaves in six or seven rows, somewhat cylindrical, obtuse, fleshy, spreading ; cyme three cleft, leafy," much resembling the last species, but larger ; cymes of two large branches and a small one ; flowers palish yellow. This plant is destitute of any pungent acrid flavour. June, July. England. P.



15. *S. An'glicum*. *English Stone Crop*. "Leaves thick, ovate, gibbous and loose at the base, alternate; cyme of two branches;" stems tufted, decumbent at the base, smooth and leafy; leaves very thick, fleshy; flowers at first thickly clustered, afterwards more remote; petals white, with a reddish rib, and dotted with red at the tip. July. Britain. P.

16. *S. An'num*. *Annual Stone Crop*. "Stem erect, solitary, annual; leaves ovate, sessile, gibbous, alternate; cyme recurved;" stem branched, smooth, about three inches high; leaves grayish spotted with purple; flowers small, white, growing at the top of the stalk in a reflexed spike. August. North of Europe. 1739. A.

Many of the Sedums are well adapted for decorating rock work, or for concealing unsightly buildings or bare walls, as they thrive with little care, and multiply much by young shoots, always looking fresh and lively. *S. Rupestre* and *S. Reflexum* are said to be cultivated in Holland to mix with lettuces in salads.

XL. PENTHÓ'RUM, from πέντε, five, and ὀρος, a column, in allusion to the figure of the fruit. Nat. ord. *Linn.* Succulentæ. *Juss.* Sempervivæ. 1 Species.

1. *P. Sedoïdes*. *American Penthorum*. "Stems numerous, diffuse, leafy, slightly branched, their opposite angles rough, with minute bristles; leaves alternate, sessile, lanceolate, acute, serrate, scarcely



succulent; spikes several, recurved;" petals white, sometimes none, in which case the segments of the calyx are increased: a plant rarely seen, unless in botanic gardens. July, August. Virginia. 1768. P.

XLII. SPER'GULA, diminutive of *spargando*, scattering about its seeds. Nat. ord. *Linn. Juss.* Caryophylli. 7 Species.

1. S. Arven'sis. *Rough-seeded Corn Spurrey.* "Leaves whorled; fruit-stalks reflected; seeds kidney-shaped, angular, rough;" herb somewhat downy and viscid; panicles terminal, forked, level topped; calyx membranous at the edge, nearly as long as the white petals. In Flanders this plant is cultivated as fodder for cattle, and poultry are fed with its seeds: with us it is considered, like the rest of the species, a troublesome weed. July. Britain. A.

XLIII. CERAS'TIUM, from *κερατιον*, a little horn, in allusion to the shape of the capsule. Nat. ord. *Linn. Juss.* Caryophylli. 20 Species.

\* *With oblong capsules.*

1. C. Perfolia'tum. *Perfoliate Cerastium, or Mouse Ear.* "Leaves connate, quite smooth, glaucous; petals smaller than the calyx;" plant with the habit of a *Lychnis*; stem a foot high, cylindric, leafy, weak; leaves opposite, connate, resembling those of *Lobel's*



Catch Fly; flowers terminal, axillary, white, on short stalks; calyx bell-shaped. July. Greece. 1725. A.

2. *C. Arven'se. Corn or Field Mouse Ear.* "Leaves linear, lanceolate, obtuse, fringed at the base; petals twice the length of the calyx;" stems decumbent, forming thick tufts, pubescent; flowers large, white. May to August. Britain. P.

\*\* *With roundish capsules.*

3. *C. Re'pens. Creeping Mouse Ear, or Sea Pink.* "Leaves lanceolate; peduncles branched;" stems several, trailing; leaves hoary, about two inches long; flowers white, on slender peduncles; petals often four or five cleft; plant scarcely different from the last. May to July. France. 1759. P.

4. *C. Maximum. Great Mouse Ear Chickweed.* "Leaves lanceolate, scabrous; petals crenate; capsules globular;" stems a foot long, hairy, but near the top smooth; leaves acute, in distant pairs, sessile; flowers large, disposed nearly in an umbel; petals toothed or jagged. July. Siberia. 1792. A.

5. *C. Latifolium. Broad-leaved rough Mouse Ear.* "Leaves elliptic, scabrous; peduncles terminal, simple, generally solitary; capsule egg-shaped;" stems in tufts, short, rough, one flowered; leaves set near together, hairy; flowers white. June, July. Britain. P.

6. *C. Tomentosum. Woolly Mouse Ear.* "Leaves linear, woolly; peduncles branched, somewhat panicled;" stem five or six inches long, cottony, branch-



ed, leafy; leaves white; flowers white, large; calyx cottony, half the length of the corolla. June, July. South of Europe. 1698. P.

The *Cerastiums* making no great appearance, are rarely cultivated, unless in botanic gardens; yet, with other plants, they are not without their use in covering walls or rock-work. *C. Repens* was formerly used as an edging in garden borders.

XLIII. AGROSTEM'MA, from *αγρου στεμμα*, the garland of the field. Nat. ord. *Linn. Juss.* Caryophyllei. 4 Species.

1. *A. Githa'go.* *Corn Cockle, or Campion.* "Hirsute; calyx longer than the corolla; petals entire, or slightly notched, naked;" stem two or three feet high, branched; leaves linear, lanceolate; calyx ten ribbed, longer than the corolla, which is of a purplish red, sometimes white; petals entire, not crowned. June, July. Britain. A.

2. *A. Corona'ria.* *Rose Campion.* "Woolly; leaves egg lance-shaped; petals slightly notched, crowned, serrate;" flowers scattered, on long stalks on the branches of the upright stem; calyx callous, with thick ribs; corolla deep red, flesh-coloured or white, the red often double. June to September. Italy. 1596. B.

3. *A. Flos Jo'vis.* *Umbelled Rose Campion.* "Woolly; petals of the corolla notched;" stem erect, forked at top; leaves connate, egg lance-shaped, en-



tire, pressed to the stem; flowers in umbels at the top of the stalk, bright red: whole plant like the last, woolly. July. Switzerland. 1726. P.

4. A. Cœli Ro'sa. *Smooth Campion*. "Smooth; leaves linear, lanceolate; petals notched, crowned;" stem sometimes simple, sometimes divided, round, slender; leaves with scattered hairs; flowers on long peduncles at the top of the stem and branches; corolla pale purple. August. Sicily. 1713. A.

XLIV. Lych'nis, λυχνίς, a lamp, from the resemblance of the calyx to a lanthorn, it being semi-transparent. Nat. ord. *Linn. Juss.* Caryophyllei. 11 Species.

1. L. Chalcedo'nica. *Scarlet Lychnis*. "Flowers in bundles, level topped, many flowered; leaves ovate, rough, somewhat undulated;" stem three feet high, round, hairy, leafy, a little branched; leaves sessile, opposite, pointed, clasping the stem, often with their bases combined; flowers showy, of a rich deep scarlet, often double. June, July. Russia. 1596. P.

2. L. Flos Cu'culi. *Meadow Lychnis, or Ragged Robin*. "Petals in four deep linear segments; leaves lanceolate, smooth; fruit roundish, of one cell;" stem with rough angles, viscid above; leaves narrow; panicle forked; flowers pink, delicate, sometimes double or white. June to September. Britain. P.

3. L. Quadridenta'ta. *Four-toothed Lychnis*.



"Petals four-toothed; stem forked; leaves smooth, recurved;" stem a span high, upper joints viscid; leaves lanceolate; calyx viscid, ten streaked; petals white, notched with a tooth on each side above the middle; border four lobed; styles four or five, rarely three. May, June. Austria. 1783. A.

4. *L. Viscaria*. *Viscous or German Lychnis, or Catch Fly*. "Petals undivided; leaves linear, lanceolate, smooth; fruit of five cells;" herb smooth; stem a foot high, angular, brown, clammy under each joint; flowers in a dense, forked, oblong bunch, crimson, often double, sometimes white. May to July. Britain. P.

5. *L. Dioica*. *Red or White Field Lychnis, or Campion*. "Flowers diœcious; crown of each petal four cleft; fruit of one cell; leaves hairy;" plant hairy, somewhat viscid; two or three feet high; stem forked; leaves ovate, lanceolate; petals cloven half way down; flowers red or white, the latter smelling sweet in the evening, and by some botanists made a distinct species, under the name of *L. Vespertina*, as is the former with the name of *L. Diurna*; flowers sometimes flesh-coloured. The flowers when double are called white or red Bachelor's Buttons. May to September. Britain. P.

XLV. *OX'ALIS*, from *οξύς*, acid. Nat. ord. *Linn.*  
*Grinales. Juss. Gerania. 93 Species.*



1. *O. Acetosel'la.* *Wood Sorrel.* "Stem none; stalks single flowered; leaves ternate; leaflets inversely heart-shaped, hairy; root scaly, jointed;" leaves of a grateful acidity, on long weak stalks; leaflets drooping, purple at the back; flowers flesh-coloured, tinged with red. April, May. Britain. P.

2. *O. Viola'cea.* *Violet-coloured Wood Sorrel.* "Stem none; stalk umbellate, many flowered; flowers drooping; leaves ternate; leaflets inversely heart-shaped, fringed;" roots bulbous; leaves numerous, on stalks a span high; flower-stalks rather taller; flowers at first drooping, then erect, with delicate streaked light purple petals; tips of the calyx abrupt and glandular. May, June. North America. 1772. P.

3. *O. Stric'ta.* *American Wood Sorrel.* "Root creeping; stem erect, branched; leaves ternate; leaflets inversely heart-shaped; umbels stalked, axillary, solitary, many flowered;" stems slightly branched, leafy, round, reddish, succulent; leaves numerous, scattered, on long stalks; umbels on long stalks; flowers small, numerous, yellow; styles hairy. June to October. North America. 1658. P.

4. *O. Cornicula'ta.* *Yellow Procumbent Wood Sorrel.* "Stem branched, creeping, diffuse; leaves ternate; leaflets inversely heart-shaped; umbels stalked, axillary, solitary, of few flowers," generally of two; blossom yellow; capsule long, pointed, jerking forth its seeds when ripe at a slight touch, as is the case with most of the species. These last two pos.



sess the same acidity as the first. May to October. England. P.

The remaining species of this extensive genus are chiefly natives of the Cape, and require the protection of the green-house: they are of recent introduction. Our Common Wood Sorrel is an elegant little plant; it is said to have the leaves of Trefoil, the flower of Geranium, and the taste of Sorrel, but its flavour is more grateful, approaching to that of Lemon, and it is used in salads; it is called in Italy Lujula, which has been corrupted into Alleluia: old English authors name it Cuckoo's Meat, it flowering here at the time of that bird's arrival. This plant is the basis of the oxalic acid which is used to take iron-mould out of linen, under the name of essential salt of Lemons, but it is seldom found genuine. Oxalic acid is also obtained from some other vegetables, and from the action of nitric acid upon sugar.

### *Order Decagynia.*

XLVI. PHYTOLACCA, a barbarous word, from *φυτον*, a plant, and *lacca*, a sort of lac or lake for colouring. Nat. ord. Linn. Holoraceæ. Juss. Atriplices. 6 Species.

1. P. Decan'dra. *Virginian Poke*. "Flowers ten stamened, ten styled;" stems three or four, six or seven feet high, purple, much branched at the top; leaves egg lance-shaped, stalked, scattered, changing in Autumn to purple; flowers in bunches, solitary, opposite, white or purple; berries blackish blue:



their juice was formerly used in Portugal to give a deep colour to the red wines. The rest of the species of this genus are remarkable for differing from each other in the number of their stamens and styles. They are natives of hot climates. August, September. Virginia. 1615. P.



## CLASS XI.

## DODECANDRIA.

*Order Monogynia.*1. *Corolla none.*

I. ASARUM. Calyx three or four-cleft, placed on the germ; corolla none; capsule coriaceous, crowned; stigma six-cleft.

II. BOCCONE. Calyx two-leaved; corolla none; style bifid; pericarp two-valved; seed one.

2. *Corolla in four divisions.*

III. HALESIA. Calyx with four teeth, superior; corolla bell-shaped, four-cleft; drupe dry, with four angles; nut of four cells; two seeds, or more, but often abortive.

3. *Corolla five-petaled.*

IV. PEGANUM. Corolla of five petals; calyx of five leaves; capsule of three cells, and three valves, the partitions contrary to the valves; seeds many.

V. NITRARIA. Corolla of five petals, arched at their tips; calyx five-cleft; stamens fifteen; drupe single seeded.

VI. ARISTOTELIA. Calyx five-leaved; corolla five-petaled; style three-cleft; berry three-celled; seeds two in each cell.



VII. PORTULACA. Petals of the corolla five ; calyx in two divisions ; capsule of one cell, cut round.

4. *Corolla six-petaled.*

VIII. LYTHRUM. Calyx inferior, with twelve teeth ; petals six, inserted into the calyx ; capsule with two cells and many seeds.

5. *Corolla ten-petaled.*

IX. DECUMARIA. Calyx pitcher-shaped, with ten teeth ; petals of the corolla eight or ten ; capsule of eight to ten cells ; seeds numerous, tiled, chaffy.

*Order Digynia.*

X. AGRIMONIA. Calyx five-cleft, fenced with another ; petals of the corolla five ; seeds two, at the bottom of the calyx ; stamens seven to twelve.

*Order Trigynia.*

XI. RESEDA. Calyx of one leaf, deeply divided ; petals of the corolla laciniated or jagged ; capsule superior, gaping at the top, of one cell with many seeds.

XII. EUPHORBIA. Calyx of one leaf, inflated, inferior ; nectaries four or five, inserted into the calyx ; capsule stalked, three lobed.

*Order Tetragynia.*

XIII. CALLIGONUM. Calyx five parted ; corolla none ; filaments about sixteen, a little united at the



base; germ superior, four-sided; styles three or four not four winged, one called.

## XII. *Termentilla erecta.*

### *Order Dodecagynia.*

XIV. SEMPERVIVUM. Calyx inferior, in twelve deep segments; petals of the corolla twelve; capsules twelve, with many seeds.



## CLASS XI.

### DODECANDRIA.

#### *Order Monogynia.*

I. A'SARUM, from *a*, privative or opposite, and *eupe*, to dry up, on account of its laxative qualities. Nat. ord. *Linn.* Sarmentaceæ. *Juss.* Aristolochiæ. 3 Species.

1. A. Europæum. *Common Asarabacca.* "Leaves kidney-shaped, obtuse, in pairs;" stems short, simple, downy, one flowered, two leaved; leaves on long stalks; flower terminal, somewhat pitcher-shaped, of a dark purple, on a slender stalk: the leaves of this plant are used as a sternutatory or herb snuff. May. England. P.



2. *A. Canaden'se*. *Canadian Asarabacca*. "Leaves kidney-shaped, dagger-pointed;" leaves larger than the former; foot-stalks longer; flower greenish on the outside. April to July. Canada. 1713. P.

3. *A. Virginicum*. *Sweet-scented Asarabacca*. "Leaves heart-shaped, blunt, smooth, stalked," veined and spotted on their upper surface; flowers on longer peduncles than the foregoing, of a darker purple. April, May. North America. 1759. P.

II. BOCCO'NIA, from Paolo Boccone, a Monk, who wrote on the plants of Sicily, 1674. Nat. ord. *Linn.* Rhæadeæ. *Juss.* Papaveraceæ. 2 Species.

1. *B. Corda'ta*. *Heart-leaved Bocconia*. "Leaves cordate, a little lobed;" panicle elongated, with single, not divided branches; calyx white; stamens about twenty-four. May to August. China. 1795. P.

III. HALE'SIA, named by Ellis in honour of Dr. Stephen Hales, author of "Vegetable Staticks." Nat. ord. *Linn.* Bicornes. *Juss.* Guaiacana. 2 Species.

1. *H. Tetrap'tera*. *Four winged Snow Drop Tree*. "Leaves ovate, pointed, with hairy veins beneath; wings of the fruit equal;" leaves alternate, on downy foot-stalks, appearing a little after the flowers, which are bell-shaped, drooping, white or reddish; the tree is about the size of an apple tree, and covered with innumerable blossoms. April, May. Carolina. 1756. T.



IV. PEGANUM, from *πηγανον*, the general name for common Rue in Dioscorides, to which this plant bears a resemblance. Nat. ord. *Linn.* Multisiliquæ. *Juss.* Rutacæ. 4 Species.

1. *P. Harmala*. *Syrian Rue*. "Leaves many cleft; stem herbaceous;" herb bushy, repeatedly branched and leafy, of a glaucous hue, smooth; leaves scattered, sessile; flowers terminal, solitary, white, with green streaks. This plant is called Harmel by the Arabians. August. Spain, and the Levant. 1570. P.

V. NITRARIA, named by a Russian Botanist, from its growing near some nitre works in Siberia. Nat. ord. *Linn.* not arranged. *Juss.* Ficoideæ. 2 Species.

1. *N. Schobéri*. *Thick-leaved Nitraria*. "Leaves entire, obtuse;" stems numerous, woody, spreading, prostrate, branching; branches whitish grey, spinous; leaves four or five together, succulent; flowers in a terminal cyme, about six together, of a delicate blue and white, with orange coloured anthers. May to August. Siberia. 1778. S.

VI. ARISTOTELIA, in honour of the great philosopher. Nat. ord. not arranged. 1 Species.

1. *A. Mac'qui*. *Shining-leaved Aristotelia*. A small shrub; stem branched, round, grey; branches warty; leaves opposite, oblong, pointed, serrate, stalked; flowers stalked, nodding, globose, greenish



white; calyx woolly; berry the size of a pea, dark purple. April, May. Chili. 1773. S.

VII. PORTULA'CA, a word of whose meaning nothing satisfactory has been conjectured. Nat. ord. *Linn.* Succulentæ. *Juss.* Portulacæ. 5 Species.

1. *P. Olera'cea*. *Garden Purslain*. "Leaves wedge-shaped; flowers sessile;" plant smooth and succulent, much branched, decumbent; stem round, purplish; leaves stalked, clustered, obovate; flowers clustered, small, yellow, opening a short time at noon. This herb was formerly much eaten in salads, nor is it unpalatable; but at present it seems to be entirely neglected; stamens varying from eight to fifteen. June, July. Both Indies. 1562. A.

VIII. LYTH'RUM, from *λυθρον*, blood; its flowers having a purple tinge. Nat. ord. *Linn.* Calycanthemæ. *Juss.* Salicariæ. 16 Species.

1. *L. Salica'ria*. *Purple Lythrum, or Grasspoly*. "Leaves opposite, lanceolate, heart-shaped at the base; flowers spiked; stamens twelve;" stems quadrangular, leafy; leaves three or four together, sessile; flowers in a whorled spike, purple; the most showy of the genus. July. Britain. P.

2. *L. Virga'tum*. *Fine-branched Lythrum*. "Leaves opposite, lanceolate; panicle straight; flowers three together;" stems upright, pale brown and green, leafless at bottom, but branched and leafy at the



top; flowers six in a whorl, axillary, deep purple. June to September. Austria. 1776. P.

3. *L. Verticilla'tum.* *Whorl flowered Lythrum.*  
 "Leaves opposite, woolly underneath, slightly stalked; flowers in whorls, lateral;" stem branching, stiff, a foot and half high; leaves oblong; flowers in whorls, pale purple; peduncles many flowered; capsule two celled. July to September. North America. 1759. P.

4. *L. Hyssopifo'lium.* *Hyssop-leaved Lythrum.*  
 "Leaves alternate, linear, lanceolate; stamens six;" stem a span high, branched at the base; leaves smooth; flowers axillary, almost sessile, solitary, small, purple, sometimes five cleft and pentandrous. August. England. A.

IX. DECUMA'RIA, from *decuma*, the tenth part; in allusion to its commonly tenfold structure. Nat. ord. *Linn.* not arranged. *Juss. Myrti.* 1 Species.

1. *D. Bar'bara.* *Climbing Decumaria.* Stems clinging by fibres to the trunks of trees; leaves opposite, stalked, elliptic, veiny, shining green; flowers in a terminal corymbose panicle, cream-coloured, fragrant, somewhat resembling those of the Lime tree, but smaller: another supposed species, *D. Sarmen-tosa*, seems to be precisely the same plant. July. China. 1758.

*Order Digynia.*

X. AGRIMO'NIA, from *αγρος*, a field, and *μίσω*, to



inhabit; on account of its growing abundantly in fields. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 5 Species.

1. *A. Eupato'ria.* *Common Agrimony.* "Stem leaves pinnate, the end leaflet stalked; fruit hispid;" stem two feet high, hairy; flowers spiked, small, gold coloured: there is a variety, the White Agrimony, with a slenderer spike, of smaller dirty white flowers, native of Italy. June, July. Britain. P.

2. *A. Odora'ta.* *Sweet scented Agrimony.* "Leaves pinnate; leaflets oblong, lower ones smaller; fruit hispid;" stem about four feet high; leaves with more leaflets than the former; when rubbed smelling agreeably; flower-stalks branching; flowers on longer stalks, yellow. July. Italy. 1640. P.

3. *A. Re'pens.* *Creeping Agrimony.* "Leaves pinnate, the end leaflet, sessile; fruit hispid; spikes nearly sessile;" stems a foot high, simple; leaves spreading on the ground; leaflets serrate, ovate, woolly, style one; seeds ovate, woolly, hooked. July to September. The Levant. 1737. P.

4. *A. Agrimonoïdes.* *Three-leaved Agrimony.* "Stem leaves ternate; fruit smooth;" root leaves pinnate, with two or three pair of wings; flowers in corymbs, small, yellow; petals ovate, obtuse; stamens seldom more than eight. July. Italy. 1739. P.

Common Agrimony, like many other simples, was formerly in high repute for a variety of disorders; but though



and the commonest species, it is at present the most common.

### THE FIGURE

1. *FRUIT*. - *FRUIT* *FRUIT*; from its shape and its *FRUIT* *FRUIT*. Nat. ord. *Liliaceae*. *FRUIT* *FRUIT*. 13 Species.

2. *FRUIT*. *FRUIT* *FRUIT*. "Leaves *FRUIT*, *FRUIT*, *FRUIT* four cleft;" stem *FRUIT*, *FRUIT*, *FRUIT*, *FRUIT*, *FRUIT*, *FRUIT*; *FRUIT* with a small *FRUIT* on each side at the base; *FRUIT* *FRUIT*, *FRUIT* *FRUIT*, *FRUIT*, in *FRUIT* *FRUIT* *FRUIT* *FRUIT*. *FRUIT*. *FRUIT*. A.

3. *FRUIT*. *FRUIT* *FRUIT*. "Leaves *FRUIT* *FRUIT*, *FRUIT* *FRUIT* three or four; *FRUIT* *FRUIT* *FRUIT* *FRUIT*; calyx in four *FRUIT* *FRUIT*. *FRUIT* *FRUIT* *FRUIT*, or more, *FRUIT* *FRUIT* *FRUIT* *FRUIT* of elegant white *FRUIT*. *FRUIT* *FRUIT*. *FRUIT*. 1596. B.

4. *FRUIT*. *FRUIT* *FRUIT*, or *FRUIT* *FRUIT*; calyx equal to the *FRUIT*. segments of the petals very deep;" stems *FRUIT*, a *FRUIT* *FRUIT*, dividing into many small *FRUIT*, leaves *FRUIT*; flowers in loose spikes, terminal, on longish stalks; petals of a pale buff, prettily contrasted with the red anthers. May to October. Egypt. 1752. A.

The rest of the species having little beauty, are rarely



cultivated, unless in botanic gardens; Mignonette is universally known and admired for its delightful odour, resembling that of the vine blossom or the fruit of the raspberry. Weld is of great use in producing a yellow dye; and in Norfolk is occasionally sown in fields for that purpose.

XII. EUPHORBIA, from Euphorbus, a physician to Juba, king of Lybia. Nat. ord. *Linn.* Tricoccæ. *Juss.* Euphorbiæ. 124 Species.

\* *Stem shrubby, prickly.*

1. E. Officina'rum. *Officinal Spurge.* "Stem naked, many angled, fleshy, shrubby; prickles double;" stalks thick, many, succulent, angular when young, but roundish when old; branches distorted and irregular; flowers small, greenish white. July. Africa. 1597. S. The dry stove.

\*\* *Stems forked, not umbelliferous.*

2. E. Macula'ta. *Spotted Spurge.* "Leaves serrate, oblong, hairy; flowers axillary, solitary; branches spreading, flat, forked;" stems numerous; leaves numerous, green, red or purple, or spotted; flowers small, on short stalks; petals red; calyx green; capsule hairy. July. South America. 1660. A.

\*\*\* *Umbels with four rays.*

3. E. La'thyris. *Caper Spurge.* "Flowers in an umbel of four spokes; spokes forked; leaves opposite, quite entire;" stem upright, succulent, from three to four feet high; leaves oblong, smooth, sessile,



four rowed; flowers greenish yellow; capsule elastic; involucre heart-shaped. May, June. France, Italy. 1597. B.

4. E. A'pios. *Pear-rooted Spurge*. "Umbel of four spokes; spokes cleft; involucellums kidney-shaped; the first inversely heart-shaped;" stems two or three, a foot and a half high; leaves oblong, hairy, alternate; flowers in small umbels, small, greenish yellow. July. Isle of Candia. 1596. P.

\*\*\*\* *Umbels of five rays.*

5. E. Dul'cis. *Sweet Spurge*. "Umbels of five spokes, each forked; involucellums somewhat ovate, toothed; leaves lanceolate, obtuse, toothed; capsules hairy, warty;" involucellums very finely serrate; petals entire; stem, smooth, red, a foot high; leaves scattered, sessile; involucre two to five leaved; flowers sessile, red, crescent-shaped; capsule woolly; juice of the plant mild. June. South of Europe. 1759. P.

6. E. Para'lia. *Sea Spurge*. "Umbel of five spokes, each forked; involucellums heart kidney-shaped; leaves tiled, pointing upwards, concave;" stems upright, ascending, numerous, glaucous, red at bottom; when cultivated the leaves are spreading; nectaries five, tawny; juice very acrid. July to September. England. P.

7. E. Coralloïdes. *Coral stalked Spurge*. "Umbel of five spokes, each spoke thrice forked; involu-



cellums ovate; leaves lanceolate; capsules woolly;" stem simple, round, rush-like; petals four, entire. June to August. Sicily. 1752. P.

\*\*\*\*\* *Umbels of many rays.*

8. E. *Cyparissias*. *Cypress Spurge*. Umbel of numerous spokes, spokes forked; involucellums ovate, or heart-shaped; barren branches, with bristle-shaped leaves; fertile branches with lanceolate ones; involucre of about twenty leaves; petals crescent-shaped, yellow: it may occasionally be seen in very old country gardens, and was formerly called *Welcome to our House*. May to September. England. P.

9. E. *Myrsinites*. *Glaucous Spurge*. "Umbel of about eight spokes; involucellums somewhat egg-shaped; leaves spoon-shaped, spreading, fleshy, dagger-pointed, rough at the edge;" stems many trailing; petals four, yellow, horned with round tips, shining. April to June. Italy. 1570. P.

10. E. *Palustris*. *Marsh Spurge*. "Umbel with many spokes; spokes twice or thrice forked; involucellums ovate; leaves lanceolate; branches barren;" stem from three to five feet high, branched towards the top; leaves alternate, sessile, blunt; the first flowers five petaled, the second four petaled; petals yellow, entire, not horned. May to August. Germany. 1570. P.

This is a vast, but very natural genus; it is commodiously divided into various sections. All the species abound



with a juice more or less acrid, and used to cure warts; that of the first, when inspissated, is the Euphorbium of the shops, a most violent and dangerous medicine; this plant, and others of the first division, are preserved in stove collections for the singularity of their appearance, being without leaves, and their jointed angular stems resembling nothing of European growth, but with something of a likeness to the Indian figs. One odd species has its stem shaped like a melon; another, the Medusa's Head, has its branches twisting over each other like a parcel of serpents. The umbelled sorts are rarely cultivated. Our native species are generally considered as notorious weeds; one of them, however, the wood Spurge *E. Amygdaloides*, is not without its beauty.

*Order Tetragynia.*

XIII. CALLIGONUM, from καλλος, beautiful, and γονυ, the knee; in allusion to its jointed structure. Nat. ord. *Linn.* Holoraceæ. *Juss.* Polygoneæ. 2 Species.

1. *C. Pallasia.* *Caspian Calligonum.* "Fruit winged; wings membranous, curled, toothed;" a shrub three feet high; stems numerous, forked, spreading; branches jointed, putting out at each joint six to ten herbaceous rush-like shoots; stipula membranous; leaves at each joint of the shoots alternate, sessile, round, awl-shaped; flowers in clusters, white, with a greenish tinge; stamens sometimes ten. August. The Desarts near the Caspian Sea. 1780. S.



*Order Dodecagynia.*

XIV. SEMPERVIVUM, *semper vivens*, everliving; these plants being extremely tenacious of life. Nat. ord. Linn. Succulentæ. Juss. Sempervivæ. 14 Species.

1. *S. Tectorum*. *Common Houseleek*. "Leaves fringed, offsets spreading," growing on old tiles and decayed thatched roofs; stems erect, a foot high, leafy, corymbose; leaves succulent, keeled, acute; flowers pale pink or flesh-coloured, downy. July to September. Britain. P.

2. *S. Globiferum*. *Globular Houseleek*. "Leaves fringed; offsets resembling little globes;" stems not so tall as the former, more leafy; leaves narrower, tipped with red; flowers in a terminal cluster, large, handsome; petals yellow; their base lilac-coloured. July. Germany. 1731. P.

3. *S. Arachnoideum*. *Cobweb Houseleek*. "Leaves interwoven with hairs; offsets globular;" leaves grey, sharp pointed, having white slender threads crossing from one to the other, intersecting each other so as somewhat to resemble a spider's web; stalks six inches high, succulent, with awl-shaped leaves; flowers of eight petals, red; filaments sixteen, purple. July. The Alps. 1699. P.

4. *S. Montanum*. *Mountain Houseleek*. "Leaves not fringed; offsets spreading;" leaves smaller than in the common species; flowers variegated with lilac



and a brownish red; stamens sometimes twenty-four.  
July, Switzerland. 1762. P.

3. S. *Sedifera*. *Stem-crop-leaved Houseleek*.  
"Leaves scattered, lower ones cylindrical, upper  
ones flattened;" stems always very upright; petals  
whitish. July. South of Europe. 1769. P.

4. S. *Achebeum*. *Tree Houseleek*. "Stem arbo-  
rescent; even, branched; leaves wedge-form, smooth,  
fringed; hairs soft, spreading;" stem eight or ten  
feet high; branches terminated by round clusters of  
succulent leaves; flower-stalks from the centre of  
these clusters, terminating in large spikes of bright  
yellow flowers. December to March. Portugal. 1640.  
S. G. B.



CLASS XII.

ICOSANDRIA.

*Order Monogynia.*

1. *Calyx superior.*

I. CACTUS. Calyx superior, imbricated; corolla of many petals; berry one celled; seeds numerous.

II. PHILADELPHUS. Calyx of four leaves, superior; corolla of four petals; style four cleft; capsule of four cells, seeds numerous, each in an oblong tunic.

III. MYRTUS. Calyx five cleft, superior; petals of the corolla five; berry two or three celled; seeds several.

IV. PUNICA. Calyx in five segments, superior; petals of the corolla five; pome ten celled; seeds many, pulpy.

2. *Calyx inferior.*

V. AMYGDALUS. Calyx five cleft, inferior; petals of the corolla five; drupe having a shell perforated with pores.

VI. PRUNUS. Calyx five cleft, inferior; petals of the corolla five; drupe with a smooth shell, and slightly prominent seams.

*Cratægus. Mespilus.*



*Order Digynia.*

VII. CRATÆGUS. Calyx superior, five cleft; corolla five petaled; berry two seeded.

VIII. WALDSTENIA. Calyx in ten segments, alternate ones smaller; petals of the corolla five; styles club-shaped, deciduous; seeds two, obovate.

*Order Trigynia.*

IX. SORBUS. Calyx superior, five cleft; corolla five petaled; berry three seeded.

*Spiræa Opulifolia.**Order Pentagynia.*

X. MESPILUS. Calyx superior, five cleft; corolla five petaled; berry five seeded, each seed with two kernels.

XI. PYRUS. Calyx superior, five cleft; corolla five petaled; pome five celled, many seeded.

XII. MESEMBRYANTHEMUM. Calyx five cleft; petals of the corolla numerous, linear, cohering at the base; capsule fleshy, inferior, with many seeds.

XIII. SPIRÆA. Calyx five cleft; petals of the corolla five; capsules superior, of two valves, with several seeds.

*Order Polygynia.*

XIV. ROSA. Petals of the corolla five; calyx



pitcher-shaped, five cleft, fleshy, contracted at the neck; seeds numerous, hispid, lining the inside of the calyx.

XV. RUBUS. Calyx in five simple segments; petals of the corolla five; berry superior, composed of single seeded grains, deciduous; receptacle permanent.

XVI. TORMENTILLA. Calyx inferior, in eight segments; petals of the corolla four; seeds roundish, naked, wrinkled, attached to a small dry receptacle.

XVII. DRYAS. Calyx inferior, in eight equal segments; petals of the corolla eight; seeds with feathery tails; receptacle depressed.

XVIII. FRAGARIA. Calyx inferior, in ten segments; petals of the corolla five; receptacle of the seeds ovate, pulpy, deciduous; seeds smooth.

XIX. POTENTILLA. Calyx inferior, in ten segments; petals of the corolla five; seeds round, naked, wrinkled, fixed to a dry receptacle.

XX. GEUM. Calyx inferior, in ten segments; petals of the corolla five; seeds with a jointed awn; receptacle columnar.

XXI. COMARUM. Calyx inferior, ten cleft: petals of the corolla five, less than the calyx; receptacle ovate, spongy, woolly, persisting; seeds even surfaced.

XXII. CALYCANTHUS. Calyx pitcher-shaped, with numerous segments, coloured; petals of the corolla numerous; seeds many tailed.

*Spiræa filipendula and ulmaria.*



## CLASS XII.

## ICOSANDRIA.

*Order Monogynia.*

1. CACTUS, κακτος; the name of a prickly plant in Theophrastus, from καίω, to burn. Nat. ord. Linn. Succulentæ. Juss. Cacti. 29 Species.

1. C. Flagelliformis. *Creeping Cereus*. "Creeping; stem ten angled," channeled, with numerous weak clustered spines; flowers lateral, sessile, oblong, of a lively pink; calyx coloured, tubular; filaments white. April to June. Peru. 1696. S. Gr. Hó.

2. C. Opun'tia. *Common Indian Fig, or Prickly Pear*. "Stem jointed, divisions globular, spinous," six feet high or more, joints appearing like fleshy leaves; young joints with pointed protuberances, growing into bristly spines; flowers yellowish; stamens irritable; fruit the shape of a fig, deep red, inclosing a sweetish pulp. August. South America. 1596. S. Gr. Ho.

A genus of strange and singular succulent plants, cultivated in stoves and green-houses, for curiosity; it includes the Melon and Torch Thistles, and the plant which affords food to the cochineal insect; they all require a great degree of warmth.



II. PHILADELPHUS, from *Ptolemy Philadelphus*, *King of Egypt*. Nat. ord. *Linn.* Hesperideæ. *Juss.* Myrti. 2 Species.

1. *P. Corona'rius*. *Common Syringa*, or *Mock Orange*. "Leaves with shallow teeth," elliptic, recurved, opposite, on short stalks, darkish green, their taste remarkably like cucumbers; stems many, six to eight feet high; flowers in dense, terminal, upright clusters, large, white, powerfully scented: there is a dwarf variety. June. South of Europe. 1596. S.

2. *P. Inodo'rus*. *Carolina scentless Syringa*. "Leaves entire," more tender than the former; not often met with; shrub lower; flowers fewer, later, larger, snow white, scentless. July. Carolina. 1738. S.

III. MYRTUS. The name of this genus varies in different Greek writers; it may probably be derived from *μύρρα*, myrrh, on account of its grateful odour. Nat. ord. *Linn.* Hesperideæ. *Juss.* Myrti. 28 Species.

1. *M. Commu'nis*. *Common Myrtle*. "Flowers solitary; involucre two leaved;" a bushy evergreen shrub; leaves more or less ovate, entire, smooth; flowers on stalks, simple, axillary, white, with a frequent tinge of red externally; berries the size of a pea, violet-coloured, sweetish. July. South of Europe. 1597. Gr. Ho. S.

Var. 1. *Broad-leaved Roman Myrtle*. Leaves larger; flowers two or four, from the same axil.



Var. 2. *Broad-leaved Myrtle*. Leaves small, sessile; flowers small.

Var. 3. *Italian or Nutmeg Myrtle*. Branches more erect; petals before opening tipped with purple.

Var. 4. *Orange or Bay-leaved Myrtle*. Leaves in clusters round the branches.

Var. 5. *Broad-leaved Dutch Myrtle*. Mid-rib of the leaf on the underside purple; flowers often double.

2. *M. Pimenta*. *Pimenta*, *All Spice*, *Jamaica Pepper*. "Flowers in three-forked panicles; leaves oblong, lanceolate;" stem arborescent; leaves opposite, often three together; flowers abundant, small, greenish white, with a profusion of white anthers; fruit about the size of pepper; whole plant highly aromatic. May to July. West Indies. 1723. E. S. Hot Ho.

The Mediterranean is bordered with thickets of Myrtle, even within the spray of the sea, which circumstance has induced poets to dedicate the shrub to Venus, the native of that element. The broad-leaved Roman variety is often the principal underwood in some of the forests in Italy; no plants have so constantly engaged the attention of the fair sex in England, who have sometimes watched their growth and prosperity with a care and tenderness approaching to the maternal.

IV. *PU'NICA*, the *Malum Punicum* of the Romans, so called because they obtained this fruit from the



north of Africa. Nat. ord. *Linn*, Pomaceæ. *Juss*, Myrti. 2 Species.

1. *P. Grana'tum*. *Common Pomegranate Tree*, "Leaves lanceolate; stem arboreous;" leaves opposite or ternate, sessile, entire; calyx thick, leathery; petals membranous, wavy, fine red, sometimes white; fruit as big as an orange, juicy; flowers sessile from the ends of the branches, singly, or three or four together; when double particularly beautiful. June to September. Spain. 1548. T.

v. *AMYGDALUS*, not very clearly derived from *αμυγμα*, a laceration; on account of the furrows on the stone. Nat. ord. *Linn*, Pomaceæ. *Juss*, Rosaceæ. 6 Species.

1. *A. Persica*. *Common Peach Tree*. "All the serratures of the leaves acute; the flowers sessile, solitary;" leaves lanceolate, alternate, smooth, serrate; calyx reddish; corolla bell-shaped, rose-coloured, with little scent, appearing before the leaves; fruit with a woolly coat. April. Persia. 1562. T.

Var. 1. *Common Nectarine Tree*, fruit with a smooth coat.

Var. 2. with double flowers.

2. *A. Commu'nis*. *Common, Sweet, or Jordan Almond Tree*. "Lower serratures of the leaves glandulous; flowers sessile, in couplets," varying from a blush-colour to a snowy white; leaves proceeding from buds, both above and below the flowers: in the



peach tree they proceed from the ends of the shoots above only; drupe with a leathery covering, not pulpy; kernel sweet; flowers appearing before the leaves. March. Barbary. 1548. T.

Var. 1. *Bitter Almond Tree*, kernel bitter.

3. A. Pu'mila. *Double-flowered Dwarf Almond*. "Leaves lanceolate, doubly serrate, veiny, wrinkled;" branches smooth, two or three feet high, purple; flowers two to a bud, sessile; calyx reddish, petals notched, red; stipules linear; flowers often double. May. June. Africa. 1683. S.

4. A. Na'na. *Common Dwarf Almond*. "Leaves narrowed at the base, ovate, sharply serrated;" stipules linear, deciduous; flowers abundant on the twigs, appearing with the first leaves; petals rose-colour; pistil woolly; stem low, shrubby, rarely exceeding an inch in thickness. March, April. Russia. 1683. S.

5. A. Orient'lis. *Silvery-leaved Almond*. "Leaves lanceolate, quite entire, silvery, perennial, shorter than the stalk;" flowers small, not succeeded by fruit in England; leaves continuing most part of the year. April. The Levant. 1756. S.

It is now generally allowed that the Nectarine Tree is only a variety of the Peach, as the most experienced gardeners cannot, with certainty, distinguish it, except by the fruit, which throughout its growth is constantly smooth. We have more cultivated varieties of the Peach than of the Nectarine; in the first a distinction is made



between the *pavie*, whose pulps adhere to the stone, and the peach, whose pulp easily separates. The standard Peach Tree is a beautiful ornament in the nursery; but its fruit does not arrive at any perfection. The Common Almond Tree, as being of higher growth, is still more ornamental, displaying its innumerable blossoms when few other trees have either leaves or flowers: the fruit is of little value. Bitter and Sweet Almond Trees are often raised from the nuts of the same tree.

VI. PRU'NUS, said to be a word of Asiatic origin, in Greek *προυνη*. Nat. ord. *Linn.* Pomaceæ. *Juss.* Rosaceæ. 33 Species.

1. P. Pa'dus. *Bird Cherry*. "Flowers in long pendulous clusters; leaves deciduous, with two glands on the under side at the base," serrated, obovate, pointed, stalked, alternate, smelling like rue; stipules linear, slightly fringed; flowers numerous, snow-white; fruit oval, dark purple, bitter, nauseous, but much eaten by birds. May. Britain. S.

Var. 1. P. Rubra. *Cornish or Cornelian Bird Cherry*, with upright clusters.

2. P. Seroti'na. *Virginian Bird Cherry*. "Flowers in lax clusters; leaves deciduous, simply serrate, lower serratures somewhat glandular;" stem thick, rising from twenty to thirty feet, much branched; leaves ovate, alternate, stalked; flowers as in the former; fruit four times as large, black. May, June. North America. 1629. T.

3. P. Lusita'nica. *Portugal Laurel*. "Flowers



in bunches; leaves evergreen, egg lance-shaped, serrate, without glands;" stem arborescent, branching on every side; bark shining, purplish; leaves on short stalks, of a lucid green; flowers in long lateral branches, white; berries oval, when ripe dark purple. June. Portugal. 1748. E. S.

4. *P. Laure-crimée. Common Laurel.* "Flowers in bunches; leaves evergreen, with two glands at the back;" a shrub sending off long branches; the bark brown; leaves large, elliptic, slightly serrate, alternate, on long foot-stalks; calyx ovate; segments reflex; petals small, white; fruit resembling a black cherry; the leaves have a kernel-like flavour, a decoction of them is highly poisonous. May. The Levant. 1629. E. S.

5. *P. Maha'leb. Perfumed Cherry Tree.* "Flowers in terminating corymbs; leaves ovate;" a low crooked tree; the wood red, sweet scented; leaves wide, pointed; flowers white; fruit black. May. Austria. 1714. T.

6. *P. Armeniaca. Apricot Tree.* "Flowers sessile; leaves somewhat heart-shaped," smooth, stalked, glandular at the base in front, the edge finely serrate; flowers white, tinged with dusky red, as are the leaf-stalks; fruit round, yellow. *P. Sibirica* seems to be a worthless variety of this, with leaves ovate. March. The Levant. 1548.

7. *P. Pu'mila. Dwarf Canadian Cherry Tree.* "Flowers somewhat umbelled; leaves narrow, lance-



olate : " a shrub three or four feet high, dividing into many slender branches near the ground ; bark reddish brown ; leaves whitish beneath ; flowers two or three from each joint, on long stalks ; petals narrow, whitish ; fruit red, acid. May. North America. 1756. S.

8. P. Cerasus. *Common Cherry Tree*. " Umbels somewhat sessile ; leaves ovate, lanceolate, smooth, folded together when young ; " branches ash-coloured, leaves serrate, stalked, pointed, a little downy beneath ; umbels leafless, pendent, composed of but few flowers ; petals white ; fruit red ; stipules toothed, glandular. May. England. T.

9. P. Avium. *Black Cherry Tree*. " Umbels sessile ; leaves ovate, lanceolate, downy beneath, folded together ; " foot-stalks glandular ; flowers white ; fruit small, black : a tall tree, rising sometimes to fifty feet, whereas the Common Cherry rarely exceeds twenty ; the wood is fit for various uses, in Hertfordshire it is called the Coroun Cherry. By some authors this species is esteemed only a variety of the last. May. England. T.

10. P. Domes'tica. *Wild Plum Tree*. " Flower-stalks mostly solitary ; leaves lanceolate, ovate, folded together when young, the branches without spines ; " leaves on short stalks, serrate, downy ; flowers white ; fruit when wild, dark blue or purple, elliptic. From this species proceed all the cultivated plums in our gardens. April. England. T.



Var. 1. *P. Cerasifera*, *Myrobalan Plum*; fruit pendulous.

11. *P. Insititia*. *Wild Bullace Tree*. "Flower-stalks in pairs; leaves lanceolate, ovate, folded together when young, downy beneath; branches ending in a spine;" leaves alternate, serrate, narrowed at the base; flowers large, white; fruit globular, black with a blue bloom, very sour. The White Bullace is a cultivated variety. April. Britain. T.

12. *P. Spino'sa*. *Sloe Tree, or Black Thorn*. "Flower-stalks solitary; leaves lanceolate, smooth; branches ending in a spine:" a low bushy shrub, formed of numerous rigid thorny branches; leaves stalked, serrate, appearing after the flowers; petals white; fruit globular, austere, black, the recent fruit is used to adulterate Port wine; and the dried leaves as a substitute for tea. April. Britain. S.

These are the principal species of this valuable genus, some others of American origin, producing a worthless fruit, may be found in catalogues, but rarely in gardens. The cultivated varieties of Plums, Cherries, and Apricots, are next to infinite: it is almost superfluous to observe, that they are continued by budding or grafting, the Cherry upon a Wild Cherry stock; the others upon Plum stocks raised from seed.

#### *Order Digynia.*

VII. *CRATÆGUS*, perhaps from *κρᾶτος*, strength. Nat. ord. *Linn.* *Pomaceæ.* *Juss.* *Rosaceæ.* 19 Species.



1. *C. Coccinea*. *Great American Hawthorn*.

"Thorny; leaves cordate, ovate, gash-angled, smooth; leaf-stalks and calyxes glandular; flowers five-styled;" stem nearly twenty feet high; branches forming a large head; leaves large, turning red in Autumn; flowers in large clusters: corolla white; berries pear-shaped, scarlet. May. North America. 1683. T.

2. *C. Cordata*. *Maple-leaved Hawthorn*. "Thorny;

leaves cordate, ovate, gash-angled, smooth; leaf-stalks and calyxes without glands; flowers five-styled;" stem about four feet high; branches spreading, armed with a few spines; flowers in small lateral bunches, white; fruit round. May. North America. 1738. S.

3. *C. Parvifolia*. *Gooseberry-leaved Hawthorn*.

"Thorny; leaves wedge-form, ovate, gashed, serrate; segments of the calyx gashed, the length of the fruit; flowers five-styled;" stem from six to seven feet high; branches slender; thorns long, slender, sharp; flowers at the ends of the branches white; fruit when ripe greenish yellow. This species is sometimes called Lord Islay's Hawthorn. May, June. Virginia. 1704. S.

4. *C. Punctata*. *Great-fruited Hawthorn*. "Some-

times thorny; leaves ovate, wedge-form, smooth, serrate; calyx somewhat woolly; segments awl-shaped, entire;" branches diffuse; clusters of flowers compound, white; styles two or three; fruit orange red, dotted, sometimes yellow. May. North America. 1746. S.



5. *C. Crus-Galli.* *Cock-spar Hawthorn.* "Thorny; leaves somewhat sessile, glittering, leathery; segments of the calyx lanceolate, somewhat serrate; flowers two-styled;" stem ten or twelve feet high; bark of the stem rough, of the branches smooth, reddish; leaves varying, oblong, lanceolate or wedge-form; flowers axillary, in roundish clusters, white with a red tinge; anthers red; fruit globular, fine red. May. North America. 1691. S.

6. *C. Oxyacantha.* *Hawthorn, Whitethorn, May.* "Leaves obtuse, somewhat three-cleft, serrate; peduncles smooth; segments of the calyx acute; styles two," more commonly one; thorns sharp, coming out between the stipules; flower-stalks branched, two or three flowers on each division, white, in clayey soils pink; berries red. Its varieties are several: 1. *The Great-fruited*; 2. *The Glastonbury*, flowering very early; 3. *The double-flowered*; 4. *The White or Yellow-berried*; 5. *The Red-blossomed*. May. Britain. T.

7. *C. Azarolus.* *Parsley-leaved Hawthorn, Azarole.* "Leaves obtuse, nearly three-cleft, somewhat toothed, pubescent; segments of the calyx ovate;" stem twenty feet high; branches irregular; bark light-coloured; flowers in lateral clusters, much larger than the former, white; fruit much larger, pleasantly acid, it is eaten in Italy; thorns few or none. May. South of Europe. 1640. T.

The Hawthorn is well known as excellent for the pur-



pose of forming hedges in inclosures of land. The fruit of all the species is pleasing to the eye, especially in Autumn, when the leaves are falling, but more calculated for the taste of birds than of mankind.

VIII. WALDSTENIA, in compliment to F. Waldstein, author of the Flora Hungarica. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosacæ. 1 Species.

1. W. Geoides. *Avens-like Waldstenia.* Stem ascending, round, straight, scored, rather hairy; radical leaves five-lobed, stalked; lobes slightly three-cleft, a little hairy; stem-leaves three-lobed, toothed; flower-stalks two or three, terminal, long; flowers yellow. July. Hungary. 1804. P.

*Order Trigynia.*

IX. SORBUS, from *sorbeo*, to suck in, the fruit not being fit for use till quite soft, so that it is rather sucked than eaten. Nat. ord. *Linn.* Pomacæ. *Juss.* Rosacæ. 5 Species.

1. S. Aucuparia. *Mountain Ash, Roan Tree.* "Leaves pinnate; leaflets equal, serrated, smoothish; corymbs compound, somewhat panicked; styles about three;" flowers very numerous, white, the size of the Hawthorn; fruit scarlet, acid, bitter: an elegant small tree. May, June. Britain. T.

2. S. Hybrida. *Bastard Mountain Ash.* "Leaves elliptic, serrated, downy beneath, simple or pinnate;



flowers corymbose ; calyx hairy :” a hybrid production between the last species and *Pyrus Arbutifolia*, retaining a great resemblance to both parents ; stipules ovate, toothed, recurved ; flowers much like the last, white ; upper rib of the leaves glandular. June. England. T.

3. *S. Domes'tica*. *True Service Tree*. “Leaves pinnate ; leaflets equal, strongly serrated, downy beneath ; flowers paniced : styles five ;” leaves and flowers twice the size of the first ; fruit like a small Pear, reddish, very austere before it is ripe. The name service seems a corruption of *sorbus* : this tree is now rare. June. England. T.

The first species is observed to be frequent about the circles of Druidical stones ; in the Scottish highlands it is still in great request for a variety of superstitious purposes. In Germany the fowlers use the berries to entice the fieldfares into nooses suspended in the woods, whence its specific name *Aucuparia*. This genus by Sir J. E. Smith is united with *Pyrus*, as is the last but one, *Cratægus*, with *Mespilus* ; the original arrangement of Linnaeus is here preferred.

### *Order Pentagynia.*

X. *MES'PILUS*, from μέσος, middle, and πλέω, to bind together, from its astringent qualities. Nat. ord. *Linn.* Pomaceæ. *Juss.* Rosaceæ. 6 Species.

1. *M. Germa'nica*. *Dutch or Common Medlar*. “Without thorns ; leaves lanceolate, downy beneath ;



flowers solitary, sessile, terminal," white, large, broad as a crown piece; fruit broad, flattened, brown, crowned with the segments of the calyx: tree middle sized, branching; leaves varying from entire to doubly serrate, narrow or broader. May to July. England. T.

2. *M. Japo'nica.* *Japan Medlar, or Loquat.* "Leaves obovate, acute, serrated, downy beneath; clusters paniced, terminal;" leaves rigid, a foot long, evergreen, smooth, shining above; flowers numerous, white, on rusty stalks; fruit globular, yellow, not bad eating. October. Japan. 1787. T.

3. *M. Pyracan'tha.* *Evergreen Thorn, or Mespilus.* "Thorny; leaves lanceolate, ovate, crenate; calyx of the fruit blunt:" a bushy irregular shrub; branches rugged; leaves scattered, smooth; corymbs copious, compound; flowers white, smallish; berries round, the size of a pea, deep red. May. South of Europe. 1629. S.

4. *M. Chamæ Mes'pilus.* *Bastard Quince.* "Unarmed; leaves oval, acutely serrated, smooth; flowers in a head, corymbose;" stem smooth, four or five feet high; branches slender, purple; leaves on long stalks, yellowish green; flowers axillary, four or five together, purplish; floral leaves long, narrow, purplish; fruit small, red. May, June. The Pyrenees. 1633. S.

5. *M. Cotoneas'ter.* *Dwarf Mespilus.* "Unarmed; leaves ovate, quite entire, sharpish, woolly



beneath; germs smooth; berries two or three seeded; a low, spreading shrub; leaves alternate; at the foot stalk two reddish stipules; flower-stalks terminal, either solitary or three or four together; calyx woolly; petals scarcely larger than the calyx, white tinged with purple; berry bright red, pear-shaped; styles three to five. April, May. Europe. 1656. S.

6. M. Tomento'sa. *Quince-leaved Mespilus*. "Unarmed; leaves ovate, entire, blunt, woolly beneath; germs woolly; berries five seeded;" stem smooth, about eight feet high, dividing into smooth branches; leaves of a thick substance, stalked; flowers five or six together, in lateral bunches, purple; fruit roundish, fine red. April, May. Its native place of growth not known. 1759. S.

The Medlar to some palates proves particularly agreeable: all the species are ornamental both in their flowers and fruit; the latter affording food for birds and deer.

XI. PY'RUS, supposed to be from πυρ, fire, the fruit drawing to a point, like flame. Nat. ord, *Linn.* Pomaceæ. *Juss.* Rosaceæ. 22 Species.

1. P. Arbutifolia. *Arbutus-leaved Dwarf Apple*. "Leaves obovate, pointed, serrated, downy beneath, their mid-rib glandular above; flowers corymbose; calyx downy;" a shrub seldom exceeding four feet in height; branches few, slender, upright; flowers in small bunches, on long stalks; petals dull white with brown spots; fruit roundish, the size of a currant,



purple, varying to red or white. May. Virginia. 1700. S.

2. *P. Botrya'pium*. *Snowy Berry Apple*. "Leaves oblong, elliptic, serrated, minutely pointed, finally smooth; flowers in clusters; petals linear, lanceolate; germ downy:" a small tree, the young leaves covered with a dense deciduous down; flowers pure white; fruit black, seldom appearing. May. North America. 1746. S.

3. *P. Amelan'chier*. *Alpine Berry Apple*. "Leaves roundish, elliptical, acute, serrated, downy beneath; flowers in clusters; petals lanceolate; germ downy:" a shrub from three to six feet high; flowers copious, snowy white; clusters drooping; fruit blueish black, the size of a currant. May. South of Europe. 1596. S.

4. *P. Commu'nis*. *Wild Pear Tree*. "Leaves ovate, serrated, finally smooth; flower-stalks corymbose; fruit elongated at the base;" a lofty tree; branches at first erect, afterwards pendulous; flowers white with pale red anthers; branches in its wild state spinous. April. England. T.

5. *P. Pollve'ria*. *Woolly-leaved or Powdered Pear Tree*. "Leaves strongly serrated, very downy beneath; flower-stalks corymbose, subdivided:" differs from the last in having the leaves downy on both sides; flowers cream-colour, much smaller and much more numerous; fruit small, not exceeding an inch in length. April. Germany. 1786. T.



6. *P. Malus*. *Wild Apple, or Crab Tree*. "Flowers in simple umbels, sessile; leaves elliptic, oblong, pointed, serrated, smooth;" branches somewhat horizontal; blossoms white above, rose-coloured beneath; fruit roundish, umbilical at the base: a low tree, when wild thorny. April, May. Britain. T.

7. *P. Spectabilis*. *Chinese Apple Tree*. "Umbels simple, sessile, nearly smooth, without floral leaves; leaves oval-oblong, serrated, smooth;" styles woolly at their base; umbels of eight or ten large, handsome, rose-coloured flowers, often double, for which alone this plant is cultivated; fruit yellow, an inch long; stem about twenty feet high. May. China. 1780. T.

8. *P. Prunifolia*. *Siberian Crab Tree*. "Umbels simple, sessile, downy; floral leaves linear, toothed, deciduous; leaves ovate, pointed, with shallow serratures," rather downy; flowers copious, with a light sweet scent, paler and smaller than the last; flower-stalks very downy; fruit resembling a white-heart cherry. April, May. Siberia. 1758. T.

9. *P. Baccata*. *Small-fruited Crab Tree*. "Umbels smooth, simple, sessile; floral leaves linear, slightly toothed, deciduous; leaves ovate, lanceolate, pointed, sharply serrate, smooth;" styles naked; fruit smaller than the petals; calyx deciduous; fruit small, red, not bigger than the haw; petals white, rather large. April. Siberia. 1784. T.

10. *P. Coronaria*, *Sweet-scented Crab Tree*.



"Leaves broad, ovate, somewhat lobed or angular, serrated, smooth; flower-stalks corymbose; styles woolly below;" umbel on smooth stalks; flowers blush-coloured, smelling like violets; fruit very acid, small, yellow. May. Virginia. 1724. T.

11. *P. Japo'nica*. *Japan Apple Tree*. "Leaves elliptic, oblong, sharply serrated, very smooth; stipules lunate, deeply toothed; flower-stalks somewhat aggregate; calyx abrupt; seeds numerous in each cell;" stem somewhat thorny; blossoms scarlet; fruit round: a small shrub or tree. May, June. Japan. 1796. S.

12. *P. Cydo'nia*. *Quince Tree*. "Leaves roundish, elliptic, entire, downy beneath; flowers solitary, stalked; calyx serrated, reflexed:" a tree rather spreading; branches crooked; petals large, flesh-coloured; fruit large, austere. May, June. Austria. 1573. T.

13. *P. Salicifo'lia*. *Willow-leaved Crab Tree*. "Leaves linear, lanceolate, hoary, nearly entire, downy beneath; flowers solitary, almost sessile:" a low bushy tree; trunk seldom more than an inch in diameter; young leaves in bundles; fruit pear-shaped, an inch long, not eatable. May. The Levant. 1780. T.

14. *P. A'ria*. *White Beam Tree*. "Leaves elliptic, cut and serrate, white and downy beneath, with crowded parallel veins; corymbs compound, woolly; styles two or three:" a handsome small tree; young



branches downy; corymbs sub-divided, many flowered; petals white; fruit globular, scarlet, dotted, mealy and acid. May, June. Britain. T.

Var. 1. *P. Intermedia*. *Seeded Beam Tree*, with leaves sinuate.

14. *P. Terminalis*. *Wild Service Pear Tree*. "Leaves simple, somewhat heart-shaped, serrate, acute, smooth, seven lobed, the lower lobes spreading;" leaves on long stalks; flowers in downy corymbs, much branched, white; fruit brown, dotted, twice the size of the haw. April to June. England. T.

Many of the species of *Pyrus* are amongst the most ornamental trees in our gardens and shrubberies; the varieties produced in Apples and Pears by cultivation are inexhaustible. Nothing shows more forcibly the power of art than the improvement thus effected, as in their wild state they are both uneatable. Their utility for the table, or the desert, or for the purpose of making cyder and perry, is not equalled by any other fruit raised in this country.

XII. MESEMBRYANTHEMUM, from μέσος, middle, σπέρμα, an embryo, and ἄνθος, a flower, because the germ is in the centre of the flower. Nat. ord. Linn. Succulentæ. Juss. Ficoideæ. 86 Species.

1. *M. Crystallinum*. *Diamond Fig Marygold*, *Ice Plant*. "Leaves alternate, ovate, waved, papillary; flowers sessile; segments of the calyx ovate, broad;" stem spreading widely; flowers copious,



flesh-coloured; the fruit dark purple; the whole plant appearing as if frosted over, which is caused by innumerable little bladders in the cuticle filled with limpid juice; to the touch the whole herb is cold. July to September. Greece. 1714. A. Gr. Ho.

Modern catalogues have increased the number of species in this immense genus to upwards of two hundred. With two or three exceptions, they are all inhabitants of the Cape, growing in an arid soil: they require with us the protection of a green-house, and are distinguished by their brilliant flowers. They have been separated by botanists into various sections, but from their great number, the minute differences in their specific characters, and their liability to form hybrid or mule varieties, they are seldom studied unless by nurserymen, who alone have opportunity of comparing them. This genus was formerly called *Ficoides*. One species growing in Egypt, is esteemed for making the best sort of pot-ash. The capsules in some species are fig-shaped.

XIII. SPIRÆA, from *σπείρα*, a rope, some of these shrubs being flexible. Nat. ord. *Linn.* Pomaceæ. *Juss.* Rosaceæ. 22 Species.

\* *Shrubby.*

1. *S. Lævigata.* *Smooth-leaved Spiræa.* "Leaves obovate, lanceolate, entire, sessile, smooth; clusters stalked, corymbose;" flowers pure white, in terminal clusters; stems numerous, straight, shrubby, with round branches. April to June. Siberia. 1774. S.



2. *S. Salicifolia*. *Willow-leaved Spiræa*. "Leaves ovate, lanceolate, bluntish, serrate, smooth; clusters terminal, compound;" stem four or five feet high, erect, bushy; leaves stalked, deeply serrate; flowers pink, with a dark red calyx: this plant is called by gardeners *Spiræa Frutex*; it varies with flowers flesh-coloured; with flowers paniced; with leaves broader. June to August. Britain. S.

3. *S. Tomento'sa*. *Scarlet Spiræa*. "Leaves ovate, unequally serrated, downy and white beneath; clusters compound, downy;" flowers bright red, small: a shrub much resembling the last, August. Pennsylvania. 1736. S.

4. *S. Hypericifolia*. *Hypericum-leaved Spiræa*, *Hypericum Frutex*. "Leaves obovate, entire; umbels sessile;" stems slender, shrubby, five or six feet high, sending out side branches from the whole length; leaves egg wedge-shaped, punctured with dots; flowers copious, white, pretty. April, May, Canada. 1640. S.

5. *S. Chamædrifolia*. *Germander-leaved Spiræa*. "Leaves obovate, smooth, gash-toothed at the tip, serrate; corymbs stalked;" leaves slightly glaucous on both sides; flowers white, rather larger than the last, nearly umbellate; branches angular; stems numerous, wand-like. June, July. Siberia. 1789. S.

6. *S. Ulmifolia*. *Elm-leaved Spiræa*. "Leaves ovate, smooth, doubly toothed, glaucous beneath; corymbs bunchy, on long stalks:" a shrub larger than



the last; flowers larger; leaves an inch and a half long, stalked. June. Carniola. 1790. S.

7. *S. Crenata*. *Hawthorn-leaved Spiræa*. "Leaves obovate, acute, toothed at the tip; corymbs lateral, crowded, stalked;" leaves varying in shape and size, but always toothed at the end; flowers white, in copious, short, leafless clusters. April, May. Spain. 1739. S.

8. *S. Triloba*. *Three-lobed Spiræa*. "Leaves roundish, somewhat heart-shaped, bluntly lobed, toothed; umbels terminal;" a shrub about two feet high; leaves smooth, not unlike those of the Gooseberry; flowers white, copious, handsome. May. Siberia. 1801. S.

9. *S. Thalictrifolia*. *Meadow Rue-leaved Spiræa*. "Leaves obovate, obtuse, somewhat three lobed; umbels lateral, sessile;" branches straight and stiff; leaves scattered alternately, small, glaucous beneath; flowers white, smaller than in the last, and not terminal. May. Siberia. 1790. S.

10. *S. Opulifolia*. *Virginian Guelder Rose*. "Leaves ovate, three lobed, serrated, smooth; corymbs terminal, dense, with floral-leaves; capsules polished, inflated;" a small tree; leaves somewhat the size and shape of Currant leaves; flowers white, sometimes tinged with red; calyx downy. June, July. North America. 1690. S.

11. *S. Sorbifolia*. *Service-Tree-leaved Spiræa*. "Leaves pinnate; leaflets uniform, sharply serrate;



stem shrubby ; flowers panicled ;" stems three or four feet high, not very woody ; leaves bright green ; panicles large of cream-coloured flowers. August. Siberia. 1759. S.

\*\* *Herbaceous.*

12. *S. Aru'cus.* *Goats Beard Spiræa.* "Leaves doubly compound ; spikes panicled ; flowers diœcious ;" stem from three to four feet high ; leaves ample, light green ; flowers in long slender spikes, composed of alternate, small panicles, each an inch or two in length ; flowers numerous, white, feathery. June, July. Austria. 1633. P.

13. *S. Filipen'dula.* *Dropwort Spiræa.* "Leaves interruptedly pinnate ; leaflets uniform, serrated, smooth ; stem herbaceous ; flowers cymose, with many styles ;" stem one or two feet high ; leaflets small, oblong, sharply cut ; flowers cream-coloured, tinged here and there with red, often double ; root composed of oval tubers hanging by threads, whence its specific name. June to October. Britain. P.

14. *Ulma'ria.* *Meadow Sweet Spiræa.* "Leaves interruptedly pinnate, downy beneath, the terminal leaflet lobed : flowers cymose, with many styles ;" stems three or four feet high ; leaves broad, serrate, white beneath ; flowers copious, cream-coloured, with an oppressive fragrance. June to September. Britain. P.

15. *S. Loba'ta.* *Lobe-leaved Spiræa.* "Leaves



pinnate, smooth, the terminal leaflet largest; seven lobed, side ones three lobed; corymbs proliferous;" flowers red, in large clusters; leaves naked beneath. July, August. Siberia. 1765. P.

16. *S. Trifolia'ta. Three-leaved Spiræa.* "Leaves ternate, serrate, nearly equal; stipules linear; flowers terminal, loosely paniced; calyx tubular;" flowers large, drooping; petals white; calyx red; stem about a foot high. June, July. North America. 1713. P.

Most of the plants of this pretty genus are well known, and afford variety of ornament to the garden and shrubbery.

*Order Polygynia.*

XIV. RO'SA, from the Celtic word *rôs*, meaning red, which seems to have been the root of the Greek name *ρόδον*, as well as of that prevailing through most of the languages of Europe. Nat. ord. *Linn. Senticosæ. Juss. Rosaceæ.* 39 Species.

\* *Fruit nearly globular.*

1. *R. Berberifo'lia. Barberry-leaved Rose.* "Fruit globular, and with the flower-stalk prickly; stem with prickles in pairs, hooked; leaves simple, somewhat sessile;" the only species not having pinnate leaves; flowers solitary; petals yellow, crimson at the base. July. Persia. 1780. S. Gr. Ho.

2. *R. Lu'tea. Single yellow Austrian Rose.* "Fruit globular, smooth, as well as the flower-stalk; calyx and leaf-stalks with minute prickles; branches with



straight prickles;" leaflets obovate, doubly serrate, rather glutinous, smooth, five or seven in number, with a pleasant scent; flowers many, large, golden yellow, of a disagreeable odour. There is a variety with the inside of the petals of a tawny red. Germany. June. 1596. S.

3. R. Sulphu'rea. *Double Yellow Rose*. "Fruit globular; leaf-stalks and stems prickly; prickles on the stems straight," of two sorts, some large, with very numerous small ones; leaflets oval, simply serrate, smooth, glaucous, inodorous; stipules jagged; flowers large, very double, of a rich but delicate yellow, of exquisite beauty, scentless. July. The Levant. 1629. S.

4. R. Blan'da. *Labrador or Hudson's Bay Rose*. "Fruit globular, smooth; the older stems and the flower-stalks smooth, and without prickles;" the young branches and leaf-stalks bear numerous straight red prickles, but they afterwards become smooth, red, and shining; leaflets seven, oblong; stipules large; flowers solitary, crimson. Not much cultivated. May to August. Hudson's Bay. 1773. S.

5. R. Cinnamo'nea. *Cinnamon Rose*. "Fruit globular, smooth, as well as the flower-stalks; stem with small twin prickles, below the stipules; leaf-stalks scarcely prickly;" leaflets oblong, finely downy, glaucous beneath; twigs brown or reddish, shining; flowers, when cultivated, of a purplish blush colour: any cinnamon odour it is difficult to discover.



This is the earliest species producing double flowers. May. South of Europe. 1596. S.

6. *R. Kamscha'tica*. *Kamschatka Rose*. "Fruit globular, smooth, as well as the flower-stalks; stem downy, exceeding prickly; leaf-stalks scarcely prickly; leaflets obovate, abrupt," glaucous, veiny, rugged; stipules obovate; flowers solitary, purplish, pink, fragrant; segments of the calyx simple. July. Kamschatka. 1802. S.

7. *R. Arven'sis*. *White Dog Rose*. "Fruit nearly globular, smooth; flower-stalks hispid; stem and leaf stalks with hooked prickles; flowers nearly solitary, or cymose;" styles combined, terminated by a knob formed by the stigmas; twigs long, trailing, purplish brown; blossoms copious, milk white; leaflets fine, oval, sharply serrate. June, July. Britain. S.

8. *R. Spinosis'sima*. *Scotch or Burnet Rose*. "Fruit globular, smooth, as well as the flower-stalks; prickles of the stem exceedingly numerous, straight, bristly; leaflets roundish, smooth;" calyx, when in fruit, reflexed; segments entire; leaflets seven or nine, small, a little glaucous; flower-stalks solitary; flowers of a light pleasant scent, cream-coloured, yellow in the middle. Its varieties are, 1. *the double*; 2. *the striped flowered*; 3. *the red*; 4. *the marbled*. June, July. Britain. S.

9. *R. Caroli'na*. *Carolina Rose*. "Fruit globular, bristly, as well as the flower-stalks; leaf-stalks somewhat prickly; stem smooth; prickles on the sti-



pales, slightly hooked; leaflets smooth," ovate, lanceolate, finely serrate, glaucous beneath; flowers corymbose; twigs red, smooth; flowers large, of a full crimson. Its varieties are, 1. the *Double Barred*; 2. the *single Pennsylvania*; 3. the *Double Pennsylvania*, outer petals flesh-coloured, the central crimson; 4. the *spreading Carolina*; 5. the *Upright Carolina*. June, July. North America. 1736. S.

10. B. *Villosa*. *Apple Rose*. "Fruit globose, bristly, as well as the flower-stalks; prickles of the stem straight, scattered; leaf-stalks prickly; leaflets woolly," egg-oblong, five or seven, somewhat rounded at the end; doubly serrate and glandular at the edge; flowers one or two together, of a fine pale pink, often double; fruit large, scarlet, an inch in diameter. June, July. Britain. S.

11. B. *Provincialis*. *Provence Rose*. "Fruit usually round; flower-stalks and leaf-stalks hispid; prickles of the branches scattered, somewhat hooked; leaflets five, ovate, woolly beneath, with glandular secretures;" stipules linear, acute; flowers two or more at the top of each branch, large, fragrant, deep black-colour, with broad brown stains on the back of the outer petals; flowers always double; fruit never ripening. Its varieties are numerous: 1. the *deep red*; 2. the *black*; 3. the *white*; 4. *Rose de Meaux*, or *Great Daisy*; 5. *Pompon*, or *Small Daisy*. June to August. South of Europe. 1536. S.



**\*\* Fruit ovate or oblong.**

12. *R. Centifolia*. *Hundred-leaved or Dutch Rose*. "Fruit ovate, and with the flower-stalk hispid; stem hispid and prickly; leaf-stalks smooth;" leaflets commonly five, large, oval, smooth, dark green, serrate, with a purple edge; segments of the calyx half-pinnate; flowers very double, of a deep red, and not much scent. Its varieties are very numerous: 1. *the Blush*; 2. *the Burgundy Rose*, a small plant; 3. *the Single Velvet*; 4. *the Double Velvet*, of so dark a crimson, that some persons call it black; 5. *the Stepney*; 6. *the Lisbon*, and many others distinguished by florists. June, July. Doubtful whether from China. 1596. S.

13. *R. Gallica*. *Red Official Rose*. "Fruit ovate, and with the flower-stalk hispid; stem hispid and prickly; leaf-stalks hispid and prickly:" it will be observed, that the roughness of the leaf-stalk is the only specific difference between this and the former species; and as that is not constant, some authors make the *Centifolia* only a variety of this; leaves much the same; flowers of a few large spreading petals, rich and crimson, yellow at the base, highly fragrant. This has also several varieties: 1. *Rosa Mundi*, with striped or variegated flowers; 2. *the Marbled*; 3. *the Giant Rose*, of great height, colour paler. June, July. South of Europe. 1596. S.

14. *R. Damascēna*. *Damask Rose*. "Fruit ovate, turgid, hispid, as well as the flower-stalk; stem and leaf-stalks with hooked prickles; leaves ovate, point-



ed, woolly beneath; calyx half-pinnate;" leaflets more hoary than in the last three; flowers copious, pink, verging rather to a purple than to a scarlet hue, deliciously sweet; stalks slender. Its varieties are, 1. *the Blush Damask*; 2. *the York and Lancaster*, with petals striped with white; 3. *the Red Monthly*; 4. *the White Monthly*, so called from their continuing in succession throughout the summer; 5. *the Belgic*, and others of different florists. June, July. South of France, but probably introduced there from Syria by the Crusaders. 1573. S.

15. *R. Sempervirens. Evergreen Rose.* "Fruit ovate, hispid, as well as the calyx and flower-stalks; stem and leaf stalks with hooked prickles; flowers somewhat umbelled; floral leaves lanceolate, recurved;" leaflets ovate, pointed, smooth, shining, commonly seven; stems trailing, unless supported; flowers sweet, of a delicate white, single; but they are little disposed to blossom here. June to August. Germany. 1629. E. S.

16. *R. Turbina'ta. Frankfort Rose.* "Fruit top-shaped, hairy, as well as the flower-stalks; leaf-stalks and leaflets woolly; prickles scattered, hooked;" tube of the calyx bell-shaped, dilated at the top; segments entire; flowers large, crimson, apt to break before they are full blown; leaflets broad. June to August. Native country unknown. 1629. S.

17. *R. Rubigino'sa. Sweet Briar Rose, or Eglantine.* "Fruit obovate, bristly, as well as the flower-stalk;



prickles of the stem and leaf-stalks hooked, leaflets elliptic, clothed beneath with rusty-coloured glands;" the seat of a delightful fragrance; doubly serrate; upper surface slightly hairy; flowers sweet-scented, of an uniform pink. Its varieties are, 1. *the Semi-double*; 2. *the Double Mossy*; 3. *Manning's Blush*; 4. *the Double Red*; 5. *the Royal*. May, June. Britain. S.

18. R. Musco'sa. *Moss Rose*. "Fruit ovate; calyxes, flower-stalks, leaf-stalks, and branches hispid, glandular, clammy; spines of the branches straight, scattered;" flowers of an elegant crimson, with a delightful odour; leaflets large, three or five, smooth; this most beautiful of all flowers is well known by its moss-like pubescence. It is accounted by several botanists only a variety of the Provence Rose. June, July. Native country unknown. 1724. S.

19. R. Moscha'ta. *Musk Rose*. "Fruit ovate, woolly when young, as well as the flower stalks; stem and leaf-stalks prickly; leaflets oblong, pointed, smooth; panicle many flowered;" stems weak, requiring support; leaflets seven, light green, serrate; stipules small, narrow, fringed with glands; flowers of a fine musky odour, rather small, white, very numerous, in terminal panicles, whose stalks are without glands or prickles; fruit orange-coloured. Var. 1. with double flowers; it is said that the Ottar of Roses is obtained from this species by distillation. July to October. Barbary. 1596. S.



1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves comparing the actual outcomes with the objectives and goals to determine the effectiveness of the project and identify areas for improvement.



beneath; flowers two to six, in a kind of umbel, pale red, fainter towards the base, sweet scented, sometimes white, or double. June to August. Britain. S.

24. *R. Semperflorens*. *Ever-blowing Dark Chinese Rose*. "Fruit oblong, and with the flower-stalk hispid; leaf-stalks and stem hispid, prickly; prickles hooked; leaflets three or five, ovate, acute, smooth, of a dark shining green, paler beneath, with a hairy rib; calyx reflected, entire;" a plant of low growth, but may be trained; flowers usually solitary, deep crimson, tremulous, from the slenderness of their claws, fragrant. January to December. China. 1789. S.

25. *R. Indica*. *Blush Chinese Rose*. "Fruit ovate, smooth, flower-stalks bristly, glandular; leaf-stalks glandular, prickly; prickles of the stem scattered, few, slightly hooked;" leaflets usually five, ovate, pointed, smooth, shining green, paler beneath; stipules fringed with glandular bristles; flowers somewhat corymbose; calyx partly pinnate and leafy; a shrub of rapid and lofty growth; flowers with lax petals, pink, of various shades, of a slight odour. March to November. China. 1789. S.

26. *R. Bracteata*. *Macartney, or Sir George Staunton's Rose*. "Fruit obovate; floral leaves pectinate, or comb-like, which, with the flower-stalks and young branches are woolly; leaf-stalks and stem prickly; leaflets obovate, roundish, crenate, smooth, shining,"



seven or nine, their ribs minutely prickly; stipules deeply jagged; calyx silky, taper-pointed; stem armed with a pair of reddish hooked prickles under each leaf-stalk, and with innumerable small straight ones over the whole surface; flowers terminal, solitary, large, cream-coloured, agreeably scented; a tender shrub. August to October. China. 1795. S.

27. R. Alba. *White Garden Rose*. "Fruit ovate, smooth; flower-stalks and calyx bristly; leaf-stalks downy, armed like the stem, with hooked prickles;" leaflets roundish, ovate, sharply serrate, downy beneath; calyx partly pinnate; flowers large, somewhat corymbose, pure white, or tinged with a delicate blush, of a weak pleasant scent. June, July. Europe. 1597. S.

This Queen of the Garden has, in all civilized countries, been the universal favourite; no genus more natural in habit, or technical characters, can possibly be found; but the species are extremely difficult to discriminate, the cultivated varieties so frequently invading the province of each other. Some botanists have gone so far as to maintain that all Roses are merely varieties of one species; and even Linnæus seems to doubt whether they can be circumscribed by any certain limits. The habit of the genus is invariably shrubby: the leaves pinnate, with an odd leaflet, except the first species; and with stipules fastened to the leaf-stalk. The characters given as specific, such as the absence or presence of glands, and prickles or hairs upon the various parts pointed out, are not so entirely constant as could be desired.



xv. RU'BUS, *ruber*, red; from the redness of the twigs, or the juice of the fruit. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 31 Species.

\* *Stem shrubby.*

1. R. Idæ'us. *Raspberry*. "Leaves pinnate; leaflets three or five, ovate, angular, downy beneath; leaf-stalks channeled; stem with bristly prickles;" clusters terminal, rather drooping; petals erect, white, small; fruit crimson, of numerous pulpy grains. Var. 1. fruit yellowish; 2. branches and stalks without prickles. May, June. Britain. S.

2. R. Occident'alis. *Virginian Raspberry*. "Leaves ternate, taper-pointed, doubly serrate, downy beneath; leaf-stalks cylindrical, prickly, glaucous, as well as the stem;" clusters terminal, very prickly; petals small, white, commonly notched; fruit black, or red, sweetish, but not highly flavoured. May, June. North America. 1696. S.

3. R. Cæ'sius. *Dew-berry*. "Leaves ternate, hairy beneath; lateral leaflets two lobed; stem prickly, prostrate, glaucous; calyx embracing the fruit;" flowers few together, in slender prickly panicles; petals white, waved; fruit of a few large grains, black, with a blue tinge, agreeably acid. June, July. Britain. S.

4. R. Hispidus. *Bristly American Bramble*. "Leaves ternate, strongly serrated, smooth on both sides; stems trailing, round, and with the leaf-stalks clothed with numerous stiff bristles;" clusters slen-



der, of few flowers; floral leaves linear, sometimes three cleft; berries of few grains, with large wrinkled seeds. August. Canada. 1768. S.

5. *R. Fruticosus*. *Common Bramble, or Blackberry*. "Leaves mostly of five leaflets, stalked, downy beneath; stem angular, beset like the leaf-stalks and flower-stalks with hooked prickles; calyx of the fruit reflexed;" flowers in long panicles, pinkish, seldom white; berry of numerous crowded grains, black, with a sweet but mawkish taste. Its varieties are, 1. with white fruit; 2. with double flowers; 3. stem and leaf-stalks without prickles. June to September. Britain. S.

6. *R. Odoratus*. *Flowering Raspberry*. "Leaves simple, with three or five acute lobes; stem erect, hispid, but without thorns; corymbs terminal, spreading, hispid, glutinous;" petals round; flowers numerous, large, crimson; stamens white; flower-stalks brown, rough, smelling like cedar; fruit yellow, but rarely produced. June, July. North America. 1700. S.

"\* *Stem herbaceous*.

7. *R. Saxatilis*. *Stone Bramble*. "Leaves ternate, acute, slightly downy, doubly and unequally notched; runners creeping, herbaceous; panicle of few flowers;" stipules ovate, the long trailing shoots not blossoming till their extremities have taken root; petals erect, small, herbaceous, white; berry of a few large grains, pleasantly acid. June. Britain. P.



8. *R. Arc'ticus*. *Dwarf Crimson Bramble*. "Leaves ternate, smooth, bluntly serrated; stem mostly single flowered, without prickles; petals roundish, notched;" stems from four to eight inches high; flower stalked, crimson; berry of a few grains, amber-coloured, with a purplish tinge, of a very exquisite flavour. May to July. Scotland. P.

9. *R. Chamæmorus*. *Mountain Bramble, or Cloud Berry*. "Leaves simple, lobed, wrinkled; stem single flowered, and without prickles; segments of the calyx ovate;" stems about a span high, some bearing solitary male, and others female flowers; leaves shaped like those of the Mallow; calyx tawny; flowers white; berry amber-coloured, with a pleasant acid flavour. May, June. Britain. P.

10. *R. Dalibarda*. *Violet-leaved Dwarf Bramble*. "Leaves simple, heart-shaped, undivided, crenate, hairy; stems creeping; stalks single flowered; petals ovate;" flowers white, neat; fruit of five obtuse dry grains; herbage of the plant resembling some species of Violet. May, June. Canada. 1768. P.

Most of the species of this genus are natives of cool and mountainous situations. The grateful and useful Raspberry is the inmate of every garden: it is a native of most parts of Europe and also of North America. In cultivation the gardeners produce several varieties, one of which bears a double crop, the first fruit ripening in July and the latter in October, but which has not much flavour.



XVI. *TORMENTIL'LA*, from *tormen*, the cholic, which this plant was supposed to cure. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 2 Species.

1. *T. Erec'ta*. *Common Tormentil, or Septfoil*. "Stem ascending, branched; leaves sessile;" stems weak, wiry, often procumbent; leaves ternate, lanceolate, deeply serrate, with a pair of deeply cut stipules; flowers bright yellow, on long, simple, solitary, lateral stalks. May to October. Britain. P.

2. *T. Rep'tans*. *Trailing Tormentil*. "Stem prostrate; leaves stalked;" stems few, trailing, but not striking out roots; radical leaves on long stalks of five, ovate, serrated leaflets; stem-leaves of three leaflets; floral leaves sessile, narrow; flowers yellow, as large again as the last, on long stalks, opposite to the leaves. June, July. Britain. P.

XVII. *DRY'AS*, from *δρυς*, an Oak, the leaves resembling the leaves of the Oak. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 1 Species.

1. *D. Octope'tala*. *Mountain Dryas*. Stems woody, branched, a few inches high; leaves evergreen, crowded, stalked, blunt, ovate, serrate, snowy white beneath; stipules united with the foot-stalk, as in roses; flowers solitary, white, large, handsome, each on a reddish glandular stalk. June to August. Britain. P.

XVIII. *FRAGA'RIA*, from *fragro*, to smell sweet,



on account of the perfume of its fruit. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 8 Species.

1. *F. Ves'ca.* *Wood Strawberry.* "Calyx of the fruit reflected; hairs of the leaf-stalks widely spreading, those of the partial flower-stalks erect:" runners creeping and taking root; leaves ternate, on long hairy stalks; leaflets ovate, serrate; flowers somewhat cymose, white, erect, spreading; fruit red, sometimes white, drooping, ovate, fragrant. Var. 1. *F. Monophylla*, with a simple leaf, and very leafy calyx. April, May. Britain. P.

2. *F. Ela'tior.* *Hautboy Strawberry.* "Calyx of the fruit reflected; hairs of the leaf-stalks and of all the flower-stalks widely spreading, a little bent down;" flowers large, often diœcious; fruit large, round, of a dull crimson, with a high musky perfume; flesh solid, without any central cavity. April, May. England. P.

3. *F. Virginia'na.* *Scarlet or Virginian Strawberry.* "Calyx of the fruit spreading; hairs of the leaf-stalks erect, of the flower-stalks erect and adpressed; leaves nearly smooth on their upper surface;" flowers in a sort of dense corymbus; fruit scarlet. April, May. North America. 1629. P.

4. *F. Grandiflo'ra.* *Pine Strawberry.* "Calyx of the fruit erect; hairs of the leaf-stalks and of the general flower-stalk upright, those of the partial flower-stalks spreading; leaves smooth above, their serratures ovate;" flowers numerous, large, cymose, often with six petals; fruit very large, of a pale red,



with a hollow in the centre. April, May. Surinam. 1758. P.

5. *F. Chilensis*. *Chili or Carolina Strawberry*. "Calyx of the fruit erect; hairs of the leaf-stalks and of the general flower-stalk reflected, those of the partial ones horizontal; serratures of the leaves broader than long, almost crenate;" fruit large, ovate, often compressed and abrupt, scarlet, studded with innumerable seeds; inside spongy towards the middle. The gardeners have attempted to transfer the name of Hautboy to this species, it being a more profitable bearer than the true Hautboy. April, May. South America. 1727. P.

6. *F. Collina*. *Green or Alpine Strawberry*. "Calyx of the fruit erect, long, pointed; hairs of the leaf-stalks widely spreading, those of the partial flower-stalks erect;" fruit pale greenish with a yellow cast, of a sweet taste, and high flavour. This is seldom cultivated, and a variety of the Wood Strawberry has now usurped the name of Alpine. April to November. Germany. 1768. P.

7. *F. Sterilis*. *Barren Strawberry*. "Stem decumbent, destitute of runners; flowering branches weak, each bearing one or two flowers; fruit juiceless," smaller than any of the foregoing; flowers white; calyx hairy; receptacle dry; leaves ternate, silky beneath; hairs both on the leaf-stalks and flower-stalks spreading horizontally. March to May. Britain. P.



These delightful fruits are in general cultivation. New varieties are yearly starting up, and as many periodically declining. Linnaeus considered the whole family as different varieties of the first species, but later authorities having studied them with more minuteness of attention, have established the foregoing on sound principles of distinction, chiefly derived from the direction of the pubescence on the flower-stalks and leaf-stalks; the leaves in all are ternate, and the flowers white. Strawberries are universally acceptable, affording in warm weather a cool and grateful repast, of the most salutary nature. Linnaeus was once cured of a fit of the gout by their plentiful use.

XIX. POTENTILLA, diminutive of *potentia*, power, on account of its reputed virtues. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosacæ. 41 species.

\* *With pinnate leaves.*

1. *P. Fruticosa*. *Shrubby Cinquefoil*. "Leaves pinnate; stem shrubby," three or four feet high, covered with terminal solitary flowers of a golden yellow; five segments of the calyx remarkably large and leafy; leaflets five, oblong, entire; stipules membranous, united to the base of the leaf-stalk. June to August. England. S.

2. *P. Anserina*. *Silver Weed, Wild Tansey*. "Leaves interruptedly pinnate, serrated, silky beneath; stem creeping; stalks axillary, single flowered;" flowers large, golden; foliage ample, silvery. May to September. Britain. P.



3. *P. Rupes'tris.* *Rock or Strawberry-flowered Cinquefoil.* "Leaves pinnate, lyrate; leaflets three to seven, serrate; stem erect," about a foot high, branched; flowers white, remarkably like the Hautbois Strawberry, copious, somewhat panicled; seeds smooth. May to September. England. P.

\*\* *With digitate leaves.*

4. *P. Rec'ta.* *Upright Cinquefoil.* "Leaves with five or seven egg lance-shaped leaflets, coarsely toothed;" petals inversely heart-shaped, larger than the calyx; stem erect, corymbose, many flowered, forked; flowers copious, yellow or sulphur-coloured. June, July. South of Europe. 1648. P.

5. *P. Argen'tea.* *Hoary Cinquefoil.* "Leaflets five, wedge-shaped, cut, downy beneath; stems ascending," smaller than the last; leaf-stalks and back of the leaves cottony; flowers small, but conspicuous for their golden colour. June to October. Britain. P.

6. *P. Opa'ca.* *Saw-leaved Hairy Cinquefoil.* "Radical leaves of seven leaflets, linear, wedge-shaped, deeply serrated; stem leaves mostly opposite; stems slender, decumbent;" petals bent back the length of the calyx; flowers handsome, orange-coloured, on long, hairy, lateral stalks. May, June. South of Europe. 1680. P.

7. *P. Ver'na.* *Spring Cinquefoil.* "Radical leaves of five wedge-shaped, serrated, furrowed, fringed, leathery leaflets; stem leaves of three leaf-



lets; stem declining;" flowers on longish stalks, at the ends of the stems, yellow. March to May. Britain. P.

8. P. Au'rea. *Golden Cinquefoil*. "Radical leaves of five obovate, deeply serrated, hairy, somewhat membranous leaflets; stem leaves of three leaflets;" stem nearly erect, larger than the last; flowers golden, more conspicuous; petals obcordate; segments of the calyx equal in length, though not in breadth. May to July. Scotland. P.

9. P. Al'ba. *White Cinquefoil*. "Leaflets five, silky beneath, serrate; serratures at the end converging; stems thread-shaped, procumbent; receptacles hairy;" leaves glaucous, silvery; blossoms abundant, snowy, on long slender stalks. May to July. Wales. P.

10. P. Ni'tida. *Peach-blossom Cinquefoil*. "Leaflets five or three, downy, with three converging teeth; stems single flowered; receptacles woolly;" flowers pink; leaves silvery: a plant forming dense low tufts. June, July. Austria. 1798. P.

11. P. Rep'tans. *Common Creeping Cinquefoil*. "Leaflets five, obovate, serrated; stem creeping, taking root at the joints; stalks single flowered;" leaves upright, deep green, rather hairy; flowers large, yellow. June to September. Britain. P.

\*\*\* *With ternate leaves.*

12. P. Monspeli'en'sis. *Montpelier Cinquefoil*.



"Leaves ternate; stem branched, erect; flower-stalks springing out above the joints;" stems erect, hairy; leaflets oblong, serrate; flowers white, large. July, August. South of France. 1680. P.

13. *P. Tridentata*. *Trefoil-leaved Cinquefoil*.

"Leaflets three, wedge-shaped, smooth above, hairy beneath, three toothed at the summit;" stems three or four inches high; leaves several; flowers few, terminal, pure white, with purple anthers. June, July. Newfoundland. 1776. P.

14. *P. Grandiflora*. *Great-flowered Cinquefoil*.

"Leaflets three, toothed, somewhat hairy on both sides; stem reclining, longer than the leaves;" plant not much unlike *P. Reptans*, but the stems do not creep; leaflets obovate; flowers large, yellow. June, July. Switzerland. 1640. P.

This pretty and numerous genus is usually a native of cold or mountainous climates: several other species, of no particular attraction, have occasionally been introduced, but have gradually disappeared; plants of an unpromising and ordinary appearance, unless they can take care of themselves, seldom remain long in any garden. Nos. 2, 3, 9 and 14 are excellent for decorating rock work.

XX. *GEUM*, from *γινω*, to give out a flavour, from the pleasant taste of the roots. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosacæ. 11 Species.

1. *G. Virginianum*. *American Avens*. "Flowers



upright; awns of the seeds naked, hooked; stem leaves ternate; upper leaves lanceolate; petals shorter than the calyx;" stipules oblong; flowers white. July, August. North America. 1730. P.

2. *G. Stric'tum.* *Upright Avens.* "Flowers erect; awns of the seeds naked, hooked; stem leaves pinnate; leaflets and stipules cloven and cut; petals longer than the calyx;" flowers yellow; fruit hairy: whole plant covered with whitish hairs. May, June. North America. 1778. P.

3. *G. Urba'num.* *Common Avens, or Herb Bennet.* "Flowers erect; awns of the seeds naked and hooked; stem leaves ternate; radical leaves lyrate, pinnate;" stipules rounded and cut; stem branched at the upper part, clothed with deflexed hairs; leaves hairy, lobed, and cut; flowers solitary, yellow; petals shorter than the calyx. May to August. Britain. P.

4. *G. Riva'le.* *Water Avens.* "Flowers drooping; petals the length of the calyx; awns of the seeds twisted and feathery; radical leaves lyrate," hairy; stipules ovate, acute; stem a foot high; petals erect, never fully expanding, purplish red and veined, sometimes yellow, or double; calyx and stem brown red; stamens very numerous. June, July. Britain. P.

5. *G. Potentilloi'des.* *Siberian Avens.* "Stem with about two flowers; leaves pinnate, toothed; calyx of the fruit erect; awns of the seeds straight, naked," long; leaves pubescent on both sides; petals yellow. June. Siberia. 1780. P.



6. *G. Monta'num. Great Mountain Avena.* "Stem single flowered; awns of the seeds erect, woolly; leaves pinnate, hairy; the end leaflet very large, round; lower leaflets regularly decreasing;" stem round, leafy, simple; petals roundish, longer than the calyx, yellow; flowers large, spreading. There is a smaller variety. May to September. The Alps. 1597. P.

7. *G. Rep'tans. Creeping Avena.* "Stem single flowered; awns of the seed erect, woolly; leaves pinnate, cut, hairy; runners creeping;" flower-stalks erect, reddish, shaggy; petals from five to ten, large, yellow. June to August. Switzerland. 1775. P.

The last two species are abundant on the Alps, which they adorn with their handsome flowers, particularly Mount Cenis. The roots of most of the species have been long used as a mild astringent, and lately as a febrifuge in the place of Bark with considerable success.

XXI. CO'MARUM, from κομν, the hair; but wherefore is not very apparent. Nat. ord. *Linn.* Senticosæ. *Juss.* Rosaceæ. 1 Species.

1. *C. Palus'tre. Marsh Cinquefoil, Purple Marsh Locks.* Stems decumbent at the base; cylindrical, leafy, smooth; leaves on long stalks, pinnate, quinate; leaflets oblong, serrate; flowers dark purple, somewhat paniced; calyx, anthers, style and receptacle nearly black. June, July. Britain. P.

XXII. CALYCAN'THUS, from καλνξ, the calyx, and



*ædo*, a flower, because the calyx resembles a corolla.  
Nat. ord. *Linn.* not determined. *Juss.* Rosaceæ.  
2 Species.

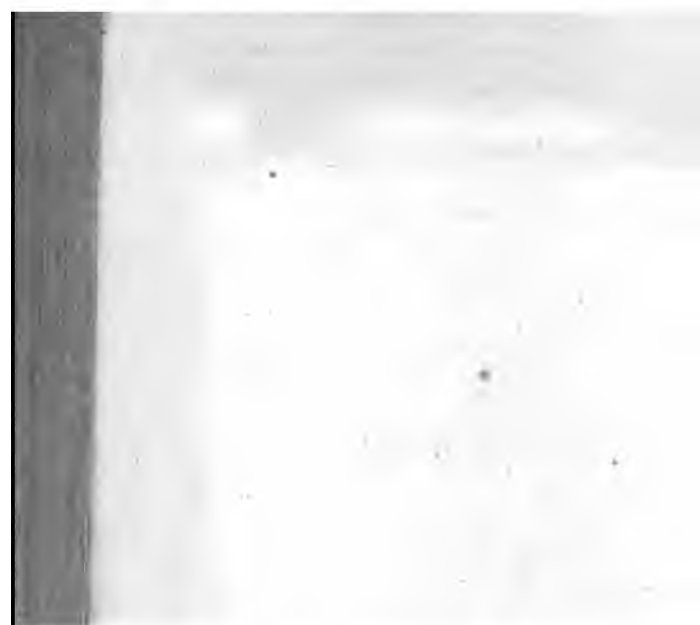
1. *C. Floridus.* *Carolina Allspice.* "Petals longer than the divisions of the calyx;" a shrub three or four feet high; stem irregularly branched, with a brown aromatic bark, whence its name; leaves opposite, stalked, egg-shaped; flowers of a dusky purple; leaves varying from oblong to roundish. May to August. *Carolina.* 1726. S.

2. *C. Præcox.* *Japan Allspice.* "Petals shorter than the divisions of the calyx;" leaves egg lance-shaped; flowers appearing before the leaves, yellow, sprinkled with red spots; fruit longer, scaly, rough; seeds five or six, which soon loose their tails, and resemble French Beans. December to March. *Japan.* 1766. S.

END OF VOLUME I.

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